

Catalogue No. 51

OHLEN'S

Saw Catalogue

...AND...

Saw Operators **Hand Book**

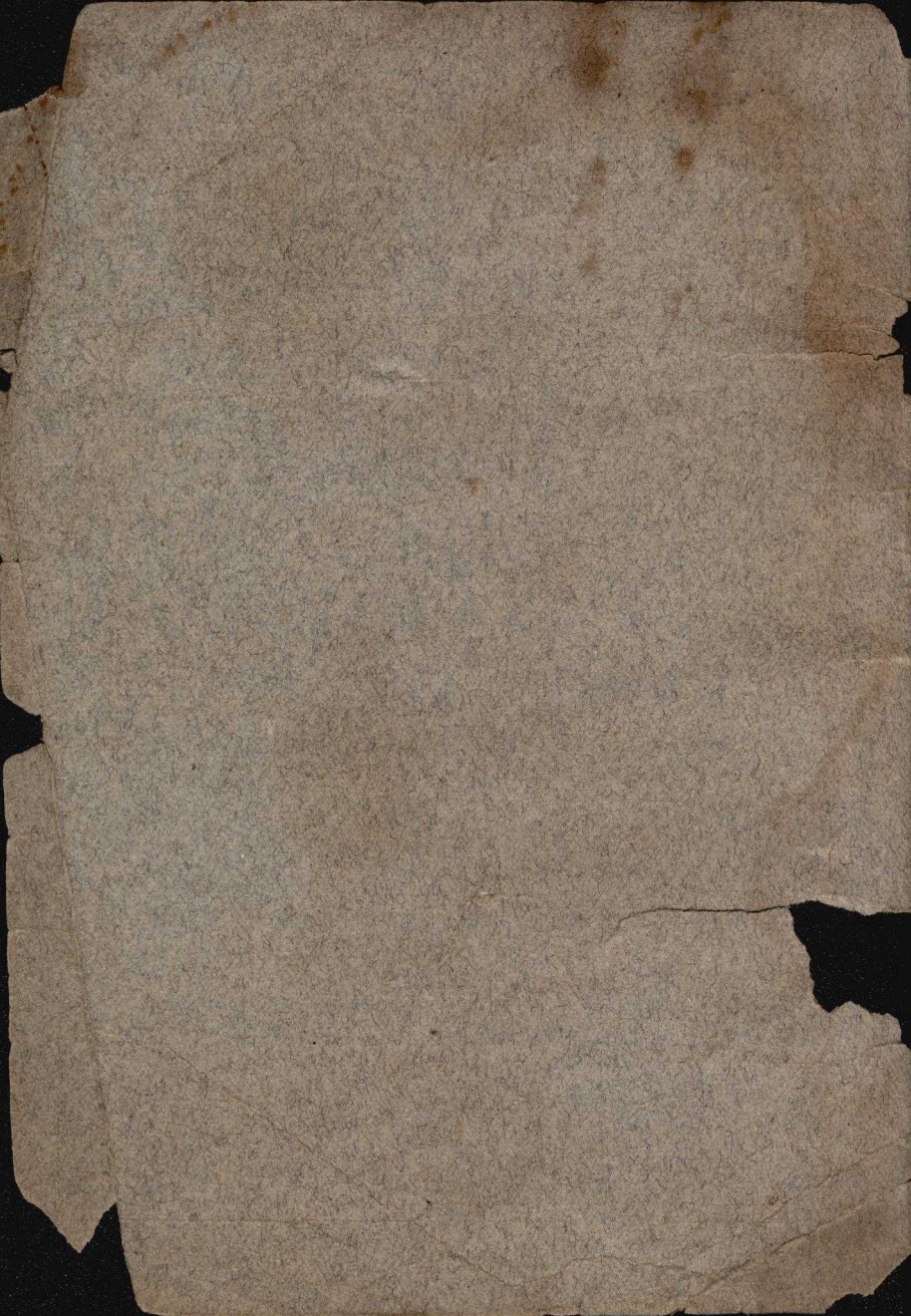
...ISSUED BY...

**The James Ohlen & Sons Saw
Manufacturing Company**

COLUMBUS, OHIO, U. S. A.
Factory Street

EXPORT AND EASTERN OFFICE
120 LIBERTY ST., NEW YORK CITY

ESTABLISHED 1852



732 25

GENERAL OFFICE OF
THE JAMES OHLEN & SONS'
SAW MANUFACTURING CO.
ESTABLISHED 1852
COLUMBUS, OHIO, U. S. A.



TO SAW USERS AND BUYERS:

A better proof that the Ohlen Saw is superior to all others could not be had than a statement to the effect that the year 1902 completed the 50th year in manufacturing Ohlen Solid and Inserted Tooth Saws and that in that year more saws were manufactured by us than ever before in history of this company. The highest possible standard of excellence is maintained throughout the entire process. Not only is the best possible steel selected for our saws, both solid and inserted tooth, but it is toothed and drilled so accurately by the most modern devices and tempered perfectly, so that a tough, even temper is always assured in the entire blade. Our tempering facilities are such that it is impossible for a saw to leave our shop until it is absolutely perfect. The man that has charge of this work has spent twenty years working and tempering saw steel, and is able to give the trade a far better saw than can be had elsewhere.

Grinding

is an important part of the work and a saw not properly ground will never give the sawmill man success. Our grinding machine is an immense affair, weighing many tons, and it is wholly an impossibility for a saw to come out other than true. We have seen new saws of other makes ground, i

such a way that they could not run true. The operator of this particular part of our work has been grinding Ohlen Saws since 1870 and is perfect in in his line.

Sawsmithing, hammering and blocking

This part of our work is under the direction of a mechanic who spent ten years actual service in some of the largest sawmills in the world, doing hammering and filing, and has spent in addition to above service, 28 years working in saw factories. He is ably assisted in his work by some of the most skilled saw-makers obtainable in this or foreign countries.

Saws Tested

Every saw is placed on a mandrel to see that it runs perfectly true before it is shipped. The temper is tested in every department and again when it is swedged and filed before packing. This is also done by a man years in our employ, and also who has spent ten years or more in actual service on a sawmill.

Our entire factory is in charge of a superintendent who has been with us for over 18 years and is naturally skilled as an inventor of no small ability. Every care is taken to see that our saws are perfect and just what we represent them to be, namely,

“Ohlen's Saws, Best on Earth.”

Saw users and buyers are always welcome visitors in our factory.

We thank the trade for the many past courtesies and earnestly request your future orders. We assure patrons the best possible service, and beg to remain,

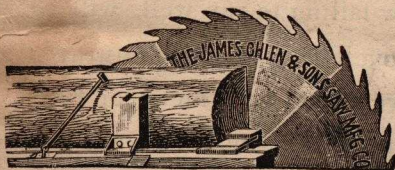
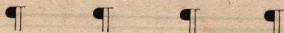
Courteously yours,

THE JAMES OHLEN & SONS' SAW MFG. CO.

L. W. SEYMOUR, General Manager.

When Ordering Circular Saws

THE FOLLOWING DIRECTIONS MUST BE
EXPLICITLY GIVEN



Right Hand Saw.



Left Hand Saw.

Diameter in inches.

Thickness or gauge at rim.

Thickness or gauge at center.

Right or left hand (see illustrations).

Number of teeth.

Any special shape tooth wanted (if so, send a rough sketch).

Size of mandrel hole.

Size of pin hole.

Distance between pin hole from center to center.

Greatest feed in inches at each revolution.

Kind of lumber to be sawed.

Number of revolutions saw makes while in cut per minute.

Always state whether rip or cross-cut saws are wanted.

If above instructions are given accurately, we will guarantee not the least bit of trouble will be had with any saw, either Solid or Inserted Tooth, bearing our brand.

All stock saws 40 inches and above, have 2-inch eye, two pin holes $\frac{5}{8}$ inch, and 3-inch circle; if different is wanted, please send template.

TERMS OF WARRANTY CIRCULAR SAWS

EACH SAW is warranted free from flaws and seams and practically true. Any saw failing to run well, will be rehammered free of charge, if immediately returned; or, if saw is found to be defective in any way, metal or temper, or tension, within 30 days from delivery, a new one will be given in exchange.

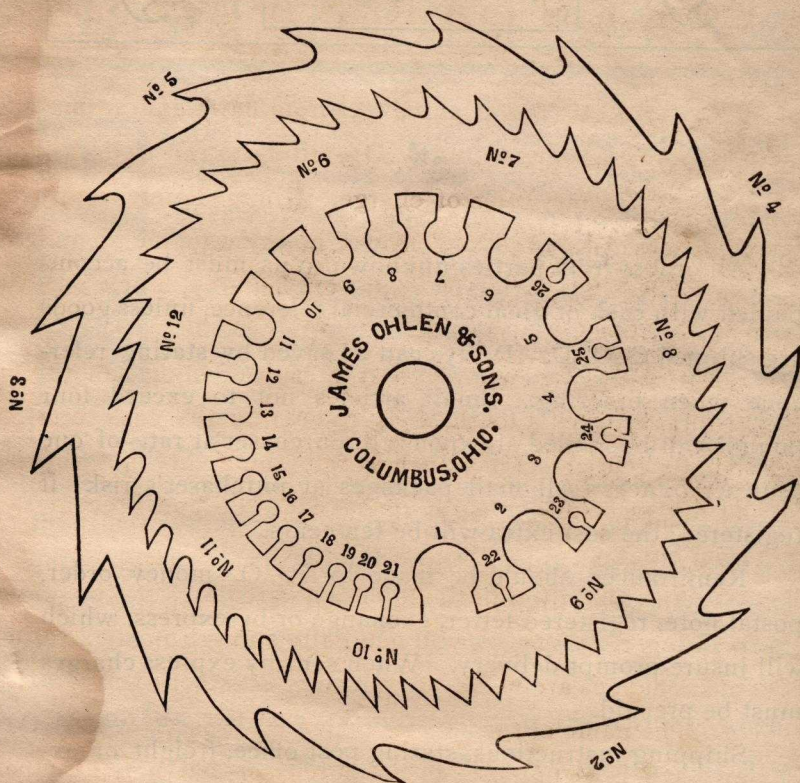
Saws cracked or broken as a result of filing square corners in gullet of a tooth, as is frequently the case, or from using a cold chisel or punch in retoothing, are not covered by our warranty. Use a round edge file and prevent saw from cracking.

Any alteration in the holes of circular saws by filing, reaming or otherwise, will generally spring the saw. When such changes are made our warranty does not apply.

The name of the "James Ohlen & Sons' Saw Mfg. Co." on a saw is a guarantee to the purchaser that it is of superior quality and reliability, and that we stand ready to back the warranty above issued. We guarantee to sell a better article than any other house in the world.

THE JAMES OHLEN & SONS SAW MFG. CO.
COLUMBUS, OHIO, U. S. A., *and* NEW YORK CITY

Standard Gauge and Teeth.



By consulting the above illustration, the party ordering can see just what kind of tooth is wanted. When ordering saws, use the above numbers, which will insure the proper tooth being sent.

Our Standard Gauge exactly corresponds with Stubb's English Gauge.

No. 4.....	$\frac{1}{4}$ inch scant.	No. 10.....	$\frac{1}{8}$ inch full.
No. 5.....	$\frac{3}{8}$ inch.	No. 11.....	$\frac{1}{8}$ inch scant.
No. 6.....	$\frac{1}{2}$ inch.	No. 12.....	$\frac{3}{4}$ inch.
No. 7.....	$\frac{5}{8}$ inch scant.	No. 13.....	$\frac{3}{4}$ inch.
No. 8.....	$\frac{7}{8}$ inch full.	No. 16.....	$\frac{1}{2}$ inch full.
No. 9.....	$\frac{1}{2}$ inch scant.	No. 22.....	$\frac{1}{2}$ inch full.



NOTICE



All orders from parties unknown to us must be accompanied with cash or good commercial reference, unless goods are shipped C. O. D. Delays can be saved by stating reference when ordering. Small articles not to exceed four pounds can be mailed at expense of purchaser at rate of one cent per ounce. All mail packages at purchaser's risk; if registered, the cost extra will be ten cents.

Remittances should be made by P. O. money order, postal note, registered letter, exchange or by express, which will insure prompt delivery. When sent by express charges must be prepaid.

Shipping instructions, stating post office, freight or express office, and county and state, will prevent delay and expense.

All prices f. o. b. Columbus, Ohio, U. S. A.

THE JAMES OHLEN & SONS SAW MFG. CO.

(INCORPORATED)

COLUMBUS, OHIO, U. S. A. and NEW YORK CITY, U. S. A.

OHLEN'S INSERTED OR CHISEL TOOTH SAWS



IT DOES not require very close observation of the following cuts of our various styles of Chisel Teeth, to show that our bit has advantages over any and all other makes. To start with, our bit rests on a shoulder in the blade, bearing towards the center, which is naturally the strongest part of saw. This enables the sawyer to swedge the bit while in the blade same as a solid saw, and not get the saw out of round. If the observer will make a comparison with other makes of inserted saws, he will find that their resting place is on rim of blade, which is quite naturally the weakest part of the entire saw. Ordinary usage will get other makes of saws out of round, even while cutting soft wood, while to try to swedge would simply ruin their saw.

Our Inserted Saw will not only cut the hardest wood, but can have teeth swedged right in the blade, and it is wholly impossible to get saw out of round. We are in receipt of letters daily stating the superiority of our goods over any other make. Our tooth is simply constructed. We do not use any wedges or plugs as some other makes do.

Anyone can, with reasonable care, insert a new set of bits and not change the tension of the saw. Our bits are forged and tempered so accurately that in cutting the hardest of woods and knots they will not break. Frequently, in

sawing, a spike, gate hinge or stone is encountered. If a solid saw is used, if it is not broken, it has half or maybe all the teeth broken off. This costs from \$4.00 to \$12.00 to cut it down, re-tooth and shape up for use again, besides, oftentimes, several days delay at a big loss, and more often the saw is ruined completely. By using our Inserted Saw seldom more than 8 or 10 teeth are broken, and if all of them are broken, that is the worse that can be done. A new set is placed in blade at rate of 3 cents per tooth. In less than 30 minutes time, and at a cost of a dollar or so, the mill can be running as before. From sixty to seventy-five thousand feet of lumber can be cut with one set of bits. We have known twice that amount to be cut with one set, but the above is a very reasonable average. Our Chisel Tooth Saws are made from 10 to 72 inches in diameter, and from 5 to 13 gauge thick. We always have a fine big assorted stock for prompt shipment.

Buy the Ohlen Inserted Saw, and get the best. All dealers handle our saws, or write us for direct shipment. Every saw placed strictly on its merits.

We guarantee our saws, either Solid or Inserted to cut frozen lumber.



OHLEN'S FOUR STYLES OF CHISEL BIT SAWS.

Note Square Base, Which Sets on Shoulder in Blade.



No. 1



No. 2



No. 3



No. 4



The above shows our various styles of Inserted Tooth Bits.

No. 1 is the most commonly in use, as it will do on the highest feed as well as the lowest feed.

No. 2 is used mostly where few teeth are desired, although they will run at a high rate of speed.

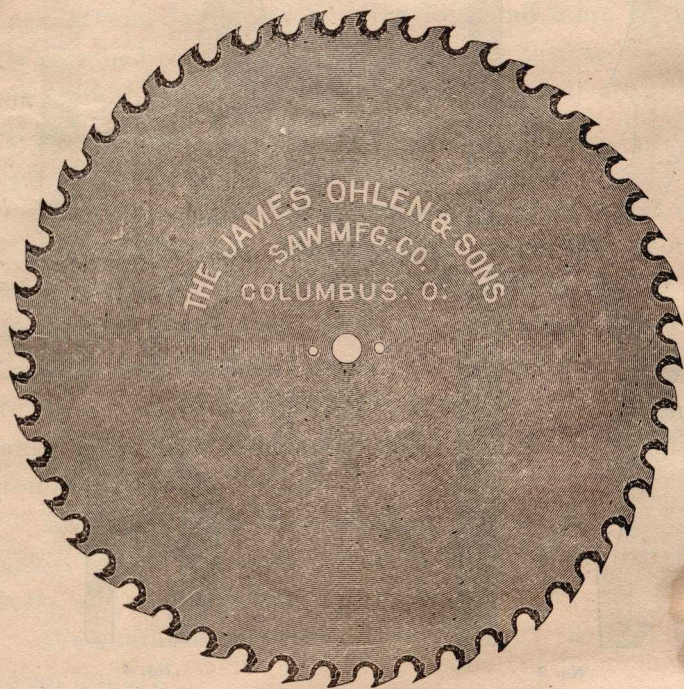
No. 3 is used almost entirely on the Pacific Coast.

No. 4 is used for Edger work only. No. 1 makes also a most desirable edger.

All of our bits are made from 6 to 10 gauge inclusive excepting No. 3, which is made as thin as 13 gauge.

CHAMPION

CHISEL TOOTH SAW

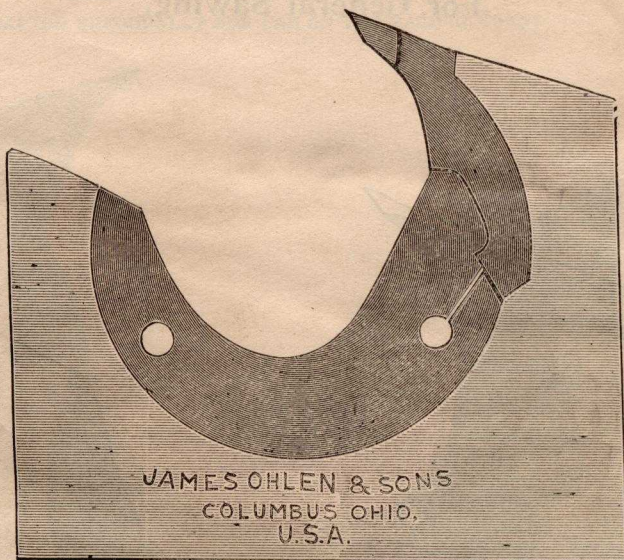


Our Chisel Bit Saws are made from the best of steel, toughly and evenly tempered same as a solid saw. These facts, together with the resting place of our bit, which is on a shoulder in blade bearing towards the center, makes the Ohlen Chisel Bit Saw superior to others. Our bit is swedged in blade same as a solid saw and it can't get out of round. All other manufacturers have bit resting on rim.

It is easy to see why sawyers prefer Ohlen Chisel Bit Saw. It never gives the user any trouble.

Style No. 1.

Ohlen's Inserted Tooth Saw.



Notice the shoulder on which the bit rests.

It does not rest on rim as other chisel bits do. It can not get saw out of round.

Ohlen's Inserted Saw is the strongest, best and most simply constructed of any on the market.

Compare our Bit and its workings with other makes.

Order Ohlen's Saws.

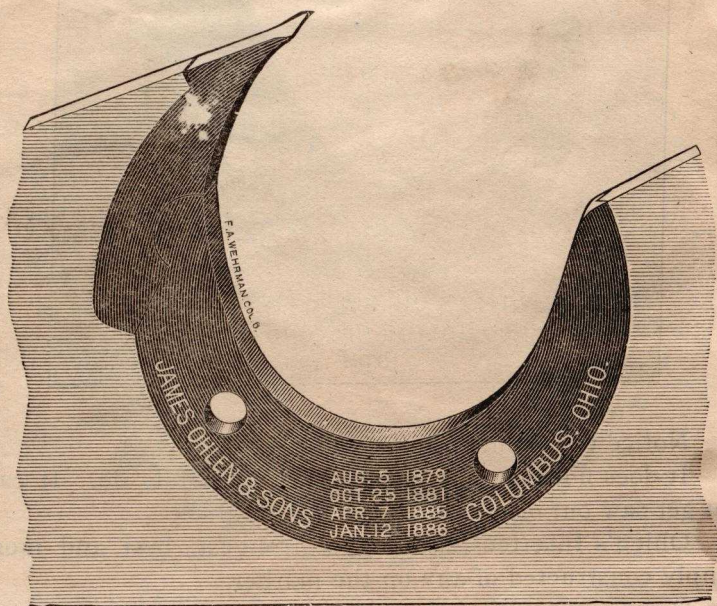
Ohlen's Style No. 1 is especially adapted for high speeded sawmills.

It is the only Inserted Tooth made that will run on an 8 or 12 inch feed; or by specifying fewer teeth when ordering saw, will, we guarantee, run on the slowest feed made.

Style No. 2.

PACIFIC.

For General Sawing.



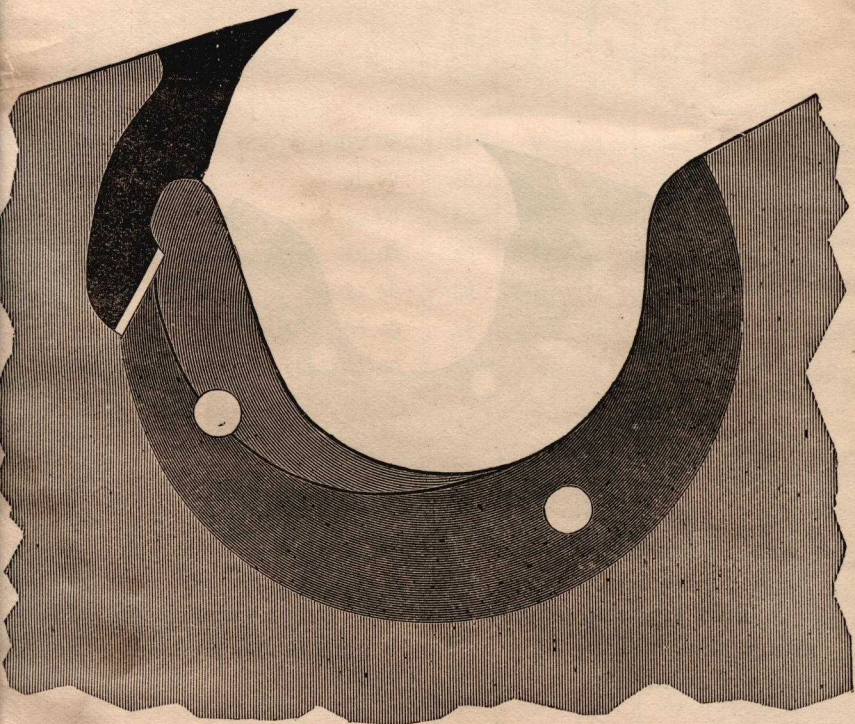
Above style used where a few or moderate number is desired.

Style No. 3.

COLUMBIA

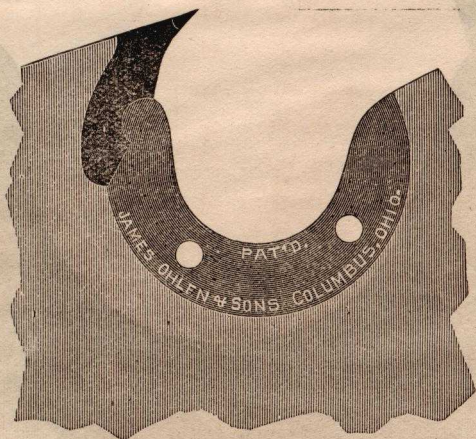
MADE FROM 5 TO 9 GAUGE INCLUSIVE

ADAPTED PRINCIPALLY FOR USE ON THE PACIFIC COAST



Style No. 4.

CHALLENGE



This is extensively used for bench work. Our 13 gauge saw, making only 5-32 inch kerf, is rapidly taking the place of solid saws.

Champion Chisel Tooth Saws.

PRICE LIST

Diameter Inches	Gauge	Size Mandrel Holes	No. Teeth in Saw	Price	Diameter Inches	Gauge	Size Mandrel Holes	No. Teeth in Saw	Price
12	9	1	.....	\$17 00	44	9	2	28	\$ 90 00
14	9	1	.....	19 00	46	9	2	30	100 00
16	9	1 $\frac{1}{8}$	.....	22 00	48	9	2	30	110 00
18	9	1 $\frac{1}{8}$	12	25 00	50	9	2	32	122 00
20	9	1 $\frac{1}{8}$	12	27 00	52	9	2	32	140 00
22	9	1 $\frac{1}{4}$	12	31 00	54	8	2	34	160 00
24	9	1 $\frac{1}{4}$	12	35 00	56	8	2	34	185 00
26	9	1 $\frac{1}{4}$	14	40 00	58	8	2	36	215 00
28	9	1 $\frac{1}{4}$	14	45 00	60	8	2	36	250 00
30	9	1 $\frac{3}{4}$	16	50 00	62	8	2	38	280 00
32	9	1 $\frac{1}{2}$	16	55 00	64	8	2	38	310 00
34	9	1 $\frac{1}{2}$	24	60 00	66	8	2	40	350 00
36	9	1 $\frac{1}{2}$	24	65 00	68	8	2	40	400 00
38	9	1 $\frac{1}{2}$	26	70 00	70	8	2	44	450 00
40	9	2	26	75 00	72	8	2	44	500 00
42	9	2	28	80 00	74	9	2	44	550 00

The Champion Chisel Tooth can be inserted in solid or other patent circular saws, reducing the size about two inches. Price, per tooth, \$2.00. This includes putting the saw in running order, and the same number of bits as with a new saw.

Our bits are made from extra fine steel, and given a fine temper. One set of bits will cut on an average of 75,000 feet, depending on care operator gives them.



CHAMPION CHISEL TOOTH FILE

THIS FILE made expressly for our Champion Chisel Tooth Saw. It keeps the tooth in a hooked shape or same as when new. They will make teeth last longer, run with less power and cut smoother lumber than if filed with a common flat file.

No. 1, per dozen.....\$4.00

No. 2, per dozen..... 3.00

When ordering Bits or Shanks for our Inserted Tooth Saw, always give the Number of Saw, which is Stamped on Blade near Trade Mark, or send a Sample Bit.



PRICE OF REPAIRS for INSERTED TOOTH SUPPLIES

Style 3 Columbia Bits, per hundred...\$4 00

“ 1 Buckeye Bits “ “ 3 00

“ 2 Pacific Bits, “ “ 3 00

Michigan Bits,..... “ “ 3 00

Champion Bits,..... “ “ 3 00

Columbia Shanks Style 3, 60 cents each

Pacific Shanks, “ 2, 40 cents each

Buckeye Shanks “ 1, 40 cents each

Michigan Shanks..... 40 cents each

Champion Shanks..... 40 cents each

In ordering Teeth for our Saws specify the “Genuine Ohlen Bits” only. Accept no other.



Having Had a Half Century of Experience in Manufacturing Saws

we have reason to believe our goods have reached the highest stage of perfection, and can safely say they are superior to all others. We have added machinery of the latest improvement, and experimented at great cost, and endeavored to give our trade the very best the market affords. We have workmen that have been for years in our employ, and like ourselves, have made the business a lifelong study.

The quality of our goods can only be reached by years of study and experience, and at all times we are glad to give our trade the benefit of such knowledge.

We use the very best of steel and give each blade a tough, even temper, and perfect tension, all of which is so essential to the successful running of a saw.

Persons ordering saws will save themselves trouble by giving full specifications, and just what saw is expected to do, and we will select a saw accordingly. We will gladly send order blanks.

EVERY SAW BEARING OUR BRAND,
"THE JAMES OHLEN & SONS SAW
MFG. CO." IS *Fully Warranted* AND IS AN
ASSURANCE THAT IT IS THE VERY
BEST THE MARKET AFFORDS ¶ ¶ ¶

Solid Tooth Circular Saws

PRICE LIST

Diameter Inches	Thickness of Gauge	Size of Hole	Price Each	Extra for Each Additional Gauge (heavier)	Price for Beveling New Saws per Gauge	Diameter Inches	Thickness of Gauge	Size of Hole	Price Each	Extra for Each Additional Gauge (heavier)	Price for Beveling New Saws per Gauge
1	24	$\frac{3}{8}$	\$0 50	\$01	\$0 06	32	10	$1\frac{5}{8}$	\$20 00	\$1 00	\$1 40
$1\frac{1}{2}$	24	$\frac{3}{8}$	55	01	07	34	9	$1\frac{5}{8}$	22 50	1 20	1 55
2	23	$\frac{3}{8}$	60	$01\frac{1}{2}$	08	36	9	$1\frac{5}{8}$	25 50	1 40	1 70
$2\frac{1}{2}$	22	$\frac{3}{8}$	65	02	09	38	9	$1\frac{5}{8}$	30 00	1 75	1 85
3	21	$\frac{1}{2}$	70	$02\frac{1}{2}$	10	40	9	2	35 00	2 00	2 00
$3\frac{1}{2}$	20	$\frac{1}{2}$	80	03	12	42	8	2	42 00	2 50	2 20
4	19	$\frac{3}{4}$	1 00	08	14	44	8	2	50 00	3 00	2 40
5	19	$\frac{3}{4}$	1 20	04	16	46	8	2	60 00	3 50	2 60
6	18	$\frac{3}{4}$	1 40	05	18	48	8	2	70 00	4 00	2 80
7	18	$\frac{3}{4}$	1 70	06	20	50	7	2	80 00	4 50	3 00
8	18	$\frac{7}{8}$	2 00	08	22	52	7	2	90 00	5 00	3 25
9	17	$\frac{7}{8}$	2 50	10	25	54	7	2	100 00	9 00	3 50
10	16	1	3 00	12	28	56	7	2	115 00	7 00	3 75
11	16	1	3 50	14	30	58	7	2	130 00	8 00	4 05
12	15	1	3 75	17	35	60	6	2	145 00	9 00	4 35
14	15	$1\frac{1}{8}$	4 50	21	40	62	6	2	160 00	10 00	4 65
16	14	$1\frac{1}{8}$	5 50	25	50	64	6	2	180 00	12 00	5 00
18	13	$1\frac{1}{4}$	7 00	30	60	66	6	2	200 00	15 00	5 35
20	13	$1\frac{5}{16}$	8 50	35	70	68	5	2	225 00	18 00	5 75
22	12	$1\frac{5}{16}$	10 00	45	80	70	5	2	255 00	21 00	6 15
24	11	$1\frac{3}{8}$	12 00	55	90	72	5	2	290 00	24 00	6 55
26	11	$1\frac{3}{8}$	14 00	65	1 05	74	5	2	330 00	27 00	7 00
28	10	$1\frac{1}{2}$	16 00	80	1 20	76	5	2	375 00	30 00	7 50
30	10	$1\frac{1}{2}$	18 00	90	1 30						

No extra charge for saws one gauge thicker than list. Circular Saws beveled one gauge without extra charge up to and including 42 inches, 44 inches and larger. beveled two gauges without extra charge.

Circular saws, 48 inches and larger, if made thinner than 10-gauge, add 10 per cent. for each gauge thinner. These saws are not warranted.

Shingle Saws.



	Each		Each
30 inches.....	\$29 00	44 inches.....	72 00
32 inches.....	32 00	46 inches.....	85 00
34 inches.....	35 00	48 inches.....	100 00
36 inches.....	38 50	50 inches.....	115 00
38 inches.....	44 00	52 inches.....	135 00
40 inches.....	50 00	54 inches.....	155 00
42 inches.....	60 00	56 inches.....	175 00

Cast-Iron Flanges, suitable for any standard shingle machine now in use, \$1.00 per inch in diameter; Steel Flanges, 8 to 26 inches diameter, $\frac{1}{8}$ inch thick or less, same price, screwed or riveted to saws.

Old collars fitted to shingle and heading saws at extra price.

RE-SAWING OR SIDING SAW

GROUND TAPERING.

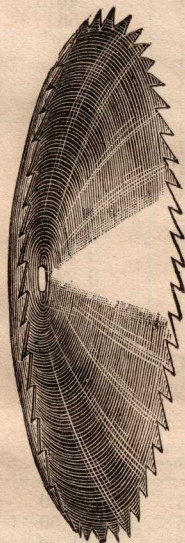
Diam. Inches	Gauge	Price Each	Diam. Inches	Gauge	Price Each
16	13 x 17.....	\$ 7 00	28	9 x 13.....	\$19 60
16	12 x 16.....	7 25	28	9 x 14.....	20 80
16	11 x 15.....	7 50	28	8 x 13.....	20 40
18	12 x 16.....	8 80	30	9 x 13.....	21 90
18	11 x 15.....	9 10	30	9 x 14.....	23 20
18	12 x 17.....	9 40	30	8 x 13.....	24 10
20	12 x 16.....	10 60	32	9 x 13.....	24 20
20	11 x 15.....	10 95	32	9 x 14.....	25 60
20	12 x 17.....	11 30	32	8 x 13.....	26 60
22	11 x 15.....	12 40	34	9 x 13.....	27 15
22	10 x 14.....	12 85	34	8 x 13.....	28 70
22	11 x 16.....	13 20	34	8 x 14.....	30 25
24	10 x 14.....	14 70	36	8 x 14.....	32 30
24	9 x 13.....	15 25	36	8 x 14.....	34 00
24	10 x 15.....	15 60	36	7 x 14.....	37 10
26	10 x 14.....	17 65	38	8 x 12.....	35 55
26	9 x 13.....	18 30	38	8 x 13.....	37 40
26	10 x 15.....	18 70	38	7 x 13.....	41 00

TOP SAWS FOR DOUBLE MILLS.

Diam. Inches	6 Gauge	7 Gauge	8 Gauge	9 Gauge	10 Gauge
24.....	\$14 20	\$13 65	\$13 10	\$12 55	\$12 00
26.....	17 10	16 45	15 80	15 15	14 15
28.....	18 40	17 60	16 80	16 00	16 00
30.....	20 70	19 80	18 90	18 00	18 00
32.....	23 00	22 00	21 00	20 00	20 00
34.....	24 90	23 70	22 50	22 50	22 50
36.....	28 30	26 90	25 50	25 50	25 50

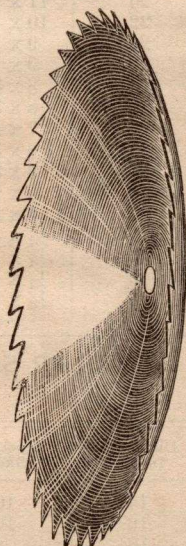
EDGER SAWS.

Gauge	12 in.	14 in.	16 in.	18 in.	20 in.	22 in.	24 in.
10....	\$4 45	\$5 35	\$6 25	\$7 60	\$9 20	\$10 45	\$12 00
9.....	4 60	5 55	6 50	7 90	9 55	10 90	12 50
8.....	4 75	5 75	6 75	8 20	9 90	11 35	13 10



Concave Saws

Saws concaved to
a smaller circle
than 16 inch,
extra price.



In.	Gauge		Extra each additional gauge	In.	Gauge		Extra each additional gauge
4	16	\$2.00	5c	12	14	5.90	17c
6	16	2.20	5c	14	13	7.20	21c
7	15	2.60	6c	16	13	9.00	25c
8	15	3.10	8c	18	12	10.75	30c
9	15	3.60	10c	20	12	13.50	35c
10	14	4.50	13c				

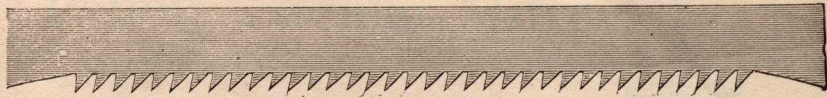
MILLING SAWS, FOR METAL.

Diameter	Gauge	Size of Hole	No. of Teeth	Price Each	Extra for each additional Gauge heavier
2	22 x 20	$\frac{1}{2}$	48	\$1 40	\$0 02
3	22 x 20	$\frac{1}{2}$	64	1 70	03
4	21 x 19	$\frac{3}{4}$	76	1 90	04
5	20 x 18	$\frac{3}{4}$	88	2 30	05
6	19 x 17	1	96	2 90	06
7	18 x 16	1	104	3 35	08
8	18 x 16	1	110	1 00	10
9	17 x 15	1	116	5 00	12
10	16 x 14	$1\frac{1}{4}$	120	6 25	15
12	16 x 13	$1\frac{1}{4}$	134	7 75	21
14	14 x 11	$1\frac{1}{2}$	148	10 00	26
16	13 x 10	$1\frac{1}{2}$	160	12 00	31
18	12 x 9	$1\frac{3}{4}$	172	15 00	38
20	11 x 8	$1\frac{3}{4}$	184	18 50	45
22	10 x 7	2	192	21 75	55
24	9 x 6	2	200	25 75	70
26	9 x 6	$2\frac{1}{2}$	208	31 00	80
28	8 x 5	$2\frac{1}{2}$	214	34 50	1 00
30	8 x 5	$2\frac{1}{2}$	222	38 50	1 12
32	7 x 4	$2\frac{1}{2}$	228	44 00	1 25
34	6 x 3	$2\frac{1}{2}$	232	48 50	1 50
36	6 x 3	$2\frac{1}{2}$	236	55 00	1 75
38	5 x 2	$2\frac{1}{2}$	240	61 00	2 00
40	5 x 2	$2\frac{1}{2}$	256	68 00	2 30
42	$\frac{1}{4}$ x $\frac{5}{16}$	3	260	76 00	2 60
44	$\frac{1}{4}$ x $\frac{5}{16}$	3	266	85 00	2 90
46	$\frac{1}{4}$ x $\frac{5}{16}$	3	271	95 00	3 22
48	$\frac{1}{4}$ x $\frac{5}{16}$	3	280	110 00	3 60

CIRCULAR SAWS OR DISCS, FOR CUTTING HOT OR COLD IRON.

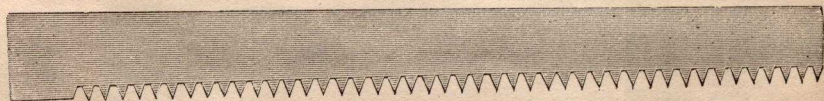
Diameter Inches	Thickness Gauge	Price Each	Diameter Inches	Thickness Gauge	Price Each
14	10	\$4 00	34	5	18 50
16	10	5 00	36	5	20 50
18	8	6 50	38	4	24 00
20	8	7 50	40	3	29 50
22	7	9 50	42	3	35 00
24	7	10 50	44	3	41 00
26	7	12 00	46	3	50 00
28	6	13 50	48	3	60 00
30	6	15 50	50	3	70 00
32	6	17 00			

MILL SAWS.



No. 5 gauge.....	\$2 20 per foot
" 6 ".....	2 10 " "
" 7 ".....	1 90 " "
" 8 ".....	1 75 " "
" 9 ".....	1 65 " "
" 10 ".....	1 55 " "

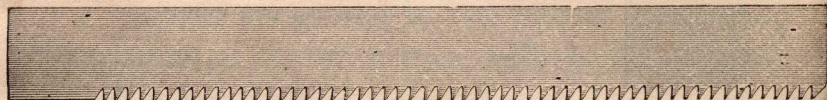
BUTTING OR DRAG SAWS (TAPER).



Tapered 10 inch butt, 8 inch point, No. 8 gauge.....	\$1 60 per foot
" 10 " " 8 " " " 9 ".....	1 55 " "
" 9 " " 7 " " " 8 ".....	1 50 " "
" 9 " " 7 " " " 9 ".....	1 45 " "
" 8 " " 6 " " " 10 ".....	1 25 " "
" 8 " " 6 " " " 11 ".....	1 20 " "
" 7 " " 5 " " " 10 ".....	1 15 " "
" 7 " " 5 " " " 11 ".....	1 10 " "

Five cents, net, per foot extra when sharpened.

DRAG SAWS OF EQUAL WIDTH.



	8 in.	9 in.	10 in.	12 in. wide
No. 10 gauge.....	\$1 45	\$1 55	\$1 75	\$2 00 per foot



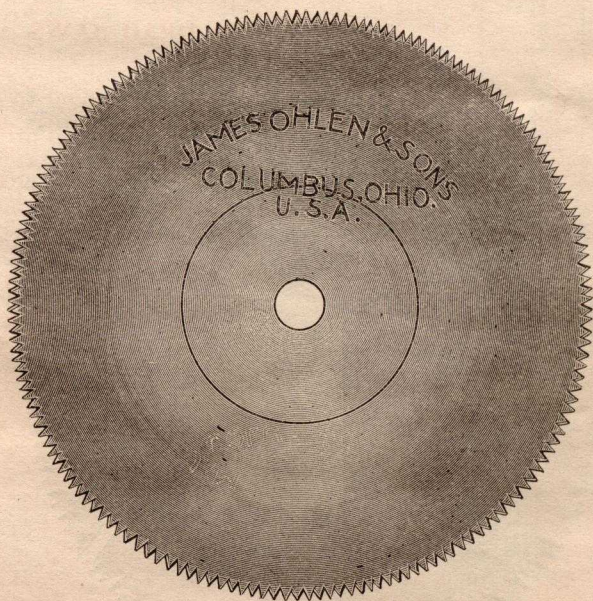
LANCE-TOOTH DRAG SAWS.

	9 in.	10 in.	12 in.	14 in. wide
No. 7 gauge.....	\$2 20	\$2 55	\$3 00	\$3 65 per ft
" 8 "	2 00	2 20	2 65	3 30 "
" 9 "	1 75	2 00	2 40	3 00 "
" 10 "	1 55	1 75	2 20	2 65 "

MULAY SAWS.

	Width	10 in.	11 in.	12 in.
No. 4, per foot.....		\$3 15	\$3 50	\$3 85
No. 5, per foot... ..		3 00	3 30	3 50
No. 6, per foot.....		2 75	3 00	3 30
No. 7, per foot.....		2 40	2 75	3 00
No. 8, per foot.....		2 20	2 40	2 75
No. 9, per foot.....		1 90	2 20	2 40

Patent Circular Mitre Saws



CIRCULAR MITRE SAWS

These saws are ground to run without set; especially adapted for smooth cutting, such as cabinet and cigar box work.

When ordering, give size of hole, also diameter of collars on Mandrel.



Circular Mitre Saws With Cleaner Tooth



These saws can be made for either ripping or cross cutting. When used for ripping we put in a greater number of cleaner teeth than when used for cross cutting. It will cut equally as smooth in either ripping or cross cutting.

MITRE SAW PRICE LIST.

Size	Gauge at Hole	Gauge at Teeth	Extra for each gauge heavier than list	Extra for each additional gauge beveling	Price
4 inches	21	18	\$0 05	\$0 14	\$2 50
5 inches	20	17	06	16	3 00
6 inches	20	17	08	18	3 50
7 inches	19	16	09	20	4 25
8 inches	19	16	12	22	4 75
9 inches	18	15	15	25	5 50
10 inches	18	15	18	28	6 00
11 inches	17	14	21	30	6 50
12 inches	17	14	25	35	7 00
14 inches	16	13	32	40	7 75
16 inches	16	13	38	50	8 75
18 inches	15	12	45	60	10 25
20 inches	15	12	53	70	12 25
22 inches	14	11	68	80	15 00
24 inches	14	11	83	90	18 00

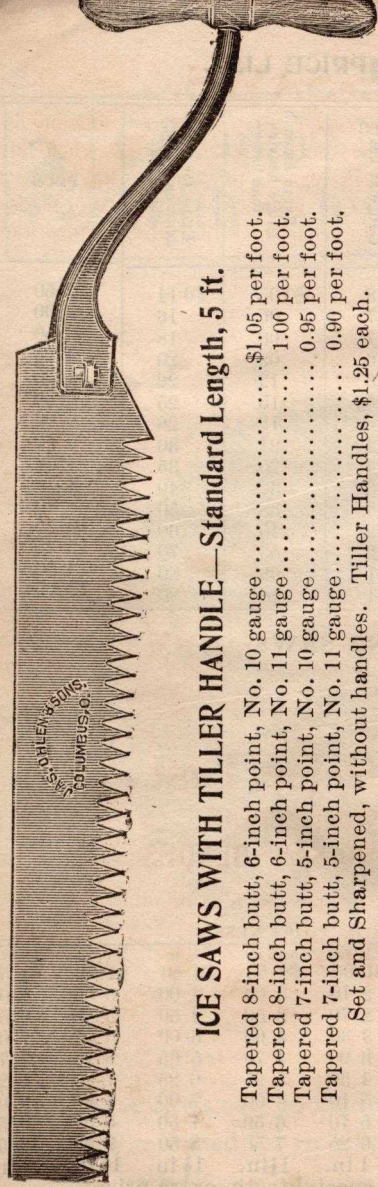
GROOVING SAWS



THICKNESS

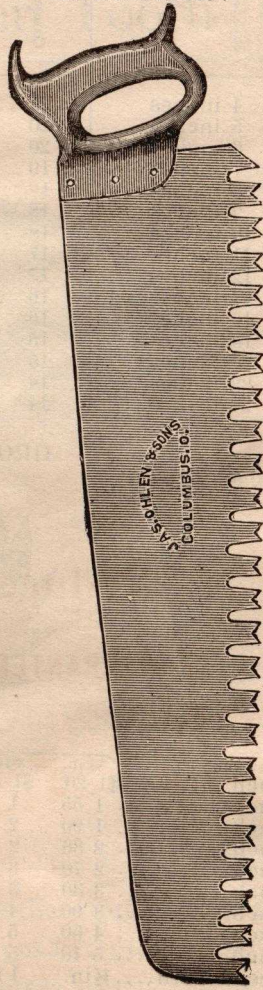
DIAMETER	$\frac{1}{8}$ in.	3-16 in.	$\frac{1}{4}$ in.	5-16 in.	$\frac{3}{8}$ in.	7-16 in.	$\frac{1}{2}$ in.
4 inch	\$1 20	\$1 40	\$1 60	\$2 50	\$3 50	\$4 50	\$5 50
5 inch	1 55	1 75	2 10	3 00	4 00	5 00	6 00
6 inch	1 90	2 20	2 70	3 50	4 50	5 50	6 50
7 inch	2 30	2 70	3 30	4 00	5 00	6 00	7 00
8 inch	2 70	3 20	3 90	4 75	5 65	6 75	7 75
9 inch	3 30	3 75	4 50	5 25	6 25	7 25	8 25
10 inch	3 90	4 50	5 10	6 00	7 00	8 00	9 00
11 inch	4 50	5 10	5 70	6 50	7 50	8 50	9 50
12 inch	5 10	5 70	6 25	7 50	8 50	9 50	10 50
Space of teeth....	$\frac{1}{2}$ in.	1 in.	1 in.	1 $\frac{1}{4}$ in.	1 $\frac{1}{2}$ in.	1 $\frac{1}{2}$ in.	2 in.

Saws with less teeth, or special teeth, extra price.



ICE SAWS WITH TILLER HANDLE—Standard Length, 5 ft.

Tapered 8-inch butt, 6-inch point, No. 10 gauge..... \$1.05 per foot.
 Tapered 8-inch butt, 6-inch point, No. 11 gauge..... 1.00 per foot.
 Tapered 7-inch butt, 5-inch point, No. 10 gauge..... 0.95 per foot.
 Tapered 7-inch butt, 5-inch point, No. 11 gauge..... 0.90 per foot.
 Set and Sharpened, without handles. Tiller Handles, \$1.25 each.



In.	Per Doz
24.....	\$2.00
26.....	2.00
28.....	2.00
30.....	2.00
32.....	27.00
34.....	2.00
36.....	28.00

With Beech Handles same price.

HAND ICE SAWS WITH IRON HANDLES—For Wagon Use. Set and Sharpened.

BAND RE-SAWS.

These saws, owing to trouble experienced in running and difficulty in procuring material for making them, are only WARRANTED when left entirely to the judgment of the maker as regards thickness, teeth, temper, ec., or how they shall be made, and in no instance will this rule be departed from. When ordering specify for what work they are intended and on what machine they are to be used.

THICKNESS

1 $\frac{1}{8}$ in. wide, 19 or 20 gauge.....	22c. per foot.
1 $\frac{1}{4}$ " " " "	25c. "
1 $\frac{3}{8}$ " " " "	28c. "
1 $\frac{1}{2}$ " " " "	32c. "
1 $\frac{3}{4}$ " " " "	50c. "
2 " " " "	60c. "
2 $\frac{1}{4}$ " 18, 19 or 20 "	75c. "
2 $\frac{1}{2}$ " " " "	85c. "
3 " 18 or 19 "	\$1.05 "
4 " " " "	1.45 "
4 $\frac{1}{2}$ " " " "	1.65 "
5 " " " "	2.00 "
6 " " " "	2.50 "

Setting, filing and joining, all sizes to 2 in., inclusive, 75c. per saw. From 2 in. to 4 in., \$1.50 per saw. From 4 in. to 6 in., \$2.00 per saw.

Joining only, will be one-third of above prices, and if only set and filed will be two-thirds of above prices.

Reduced Price List

Superceding all Former Price Lists

WARRANTED BAND-SAW BLADES

Made in any length, to 500 feet long, not set, filed or joined.

1 $\frac{1}{8}$ —3-16 and $\frac{1}{4}$ in. wide, 22 gauge.....	7c. per foot.
5-16 and $\frac{3}{8}$ in. wide, 21-22 "	8c. "
$\frac{1}{2}$ in. wide 20-21 "	10c. "
$\frac{5}{8}$ " 20-21 "	12c. "
$\frac{3}{4}$ " 20 "	14c. "
$\frac{7}{8}$ " 20 "	16c. "
1 " 20 "	17c. "

Setting, filing and joining will be charged extra, at the rate of 65c. per saw.

Joining only, 35c. per saw.

Setting and filing only, 2c. per foot.

Thin or Bevel Back Saws, extra.

REPAIRING CIRCULAR SAWS

Does not matter whose make of Saws, we repair them with all the skill possible. Send your saws to us to Hammer. The work is fully guaranteed.

When we gum saws, we grind teeth free. All repairs warranted to give satisfaction. Breaking in re-toothings at owner's risk.

Diameter in Inches.	Hammering only	Gumming and Hammering	Cutting Down Re-Toothings and Hammering	Grinding each Guage
4	\$0 25	\$0 32	\$0 40	\$0 10
5	30	40	50	15
6	35	48	60	20
7	40	56	70	30
8	50	64	80	35
9	55	72	90	40
10	60	80	1 00	45
12	65	96	1 20	50
14	75	1 12	1 50	60
16	90	1 30	1 60	70
18	1 00	1 45	1 80	80
20	1 10	1 60	2 00	90
22	1 50	2 20	2 75	1 00
24	1 60	2 40	3 00	1 20
26	1 75	2 60	3 25	1 40
28	1 90	2 80	3 50	1 60
30	2 00	3 00	3 75	1 80
32	2 55	3 85	4 80	2 00
34	2 75	4 10	5 10	2 20
36	2 90	4 30	5 40	2 40
38	3 05	4 55	5 70	2 60
40	3 20	4 80	6 00	3 00
42	4 20	6 30	7 85	3 50
44	4 40	6 60	8 25	3 70
46	4 60	6 90	8 65	3 80
48	4 80	7 20	9 00	4 00
50	5 00	7 50	9 35	4 20
52	6 95	10 40	13 00	4 30
54	7 20	10 80	13 50	4 50
56	7 50	11 20	14 00	4 70
58	7 75	11 60	14 50	4 80
60	8 00	12 00	15 00	5 00
62	10 35	15 50	19 35	5 20
64	10 70	16 00	20 00	5 40
66	11 00	16 50	20 60	5 50
68	11 35	17 50	21 25	5 70
70	11 65	18 00	21 85	5 90
72	12 00	20 60	22 50	6 00

Mark your name and ours plainly on saw case before shipment.

BURNT SAWS.



Mark your name on saw case when you ship.

The temper of burnt saws can generally be restored by retempering. We make a specialty of this class of work and rarely fail to make such saws as good as new. We undertake the work at owner's risk, though no charge will be made by us in case of failure.

Please prepay freight on all such saws.

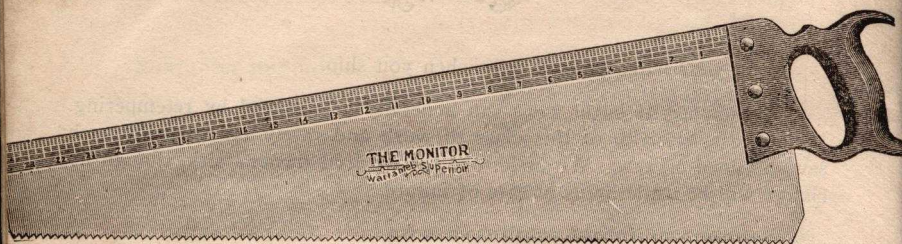
Size.	Price.
30 inches	\$6 00
32 inches	7 00
34 inches	8 00
36 inches	8 50
38 inches	9 00
40 inches	9 50
42 inches	10 50
44 inches	12 00
46 inches	13 50
48 inches	15 00
50 inches	17 50
52 inches	20 00
54 inches	22 50
56 inches	25 00
58 inches	27 50
60 inches	30 00
62 inches	34 00
64 inches	38 00
66 inches	44 00
68 inches	50 00
70 inches	58 00

All sizes under 30 inches, 1-3 list price for Circular Saws.

Above Prices Include Retempering, Gumming and Grinding.

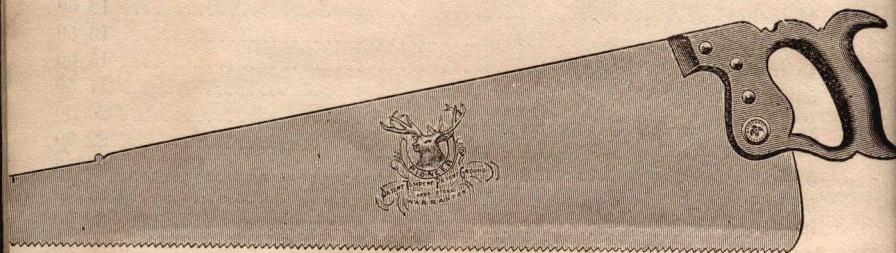
HAND SAWS.

Patent Ground $\frac{1}{2}$ and Tempered.



No. 103. THE MONITOR. Fine cast steel, straight back, polished Blade, Patent ground, even temper. 24-inch rule etched on the 26-inch saws, 18-inch rule etched on the 20-inch saws. Beechwood handle, polished edges, three improved saw screws. Etched to order.

Inches.....	20	26
Per dozen.....	\$7 00	\$8 00



Cast Steel, Patent Temper and Patent Ground.

No. 111. PIONEER. Fine cast steel, straight back, finely polished blade, patent ground, perfect temper, filed and set ready for use. Beechwood handle, polished edges, four improved brass screws. Etched to order.

Inches ..	14	16	18	20	22	24	26	28
Price ...	\$7 00	\$7 50	\$8 00	\$8 50	\$9 00	\$9 50	\$10.00	\$11 50

The above in one-half dozen boxes.



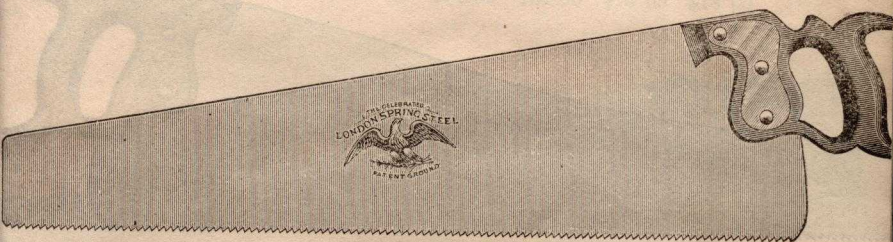
Patent Ground and Tempered.

No. 101. STAR OF THE WEST. Fine cast steel, straight back, polished, Strong Even Temper, Blade patent ground, Beechwood handle, polished edges, three improved screws. Etched to order.

Inches—Price per doz.

12	14	16	18	20	22	24	26	28	30
\$4 30	\$4 70	\$5 10	\$5 50	\$5 90	\$6 35	\$6 90	\$7 40	\$9 00	\$10 50

Above in one-half dozen boxes.



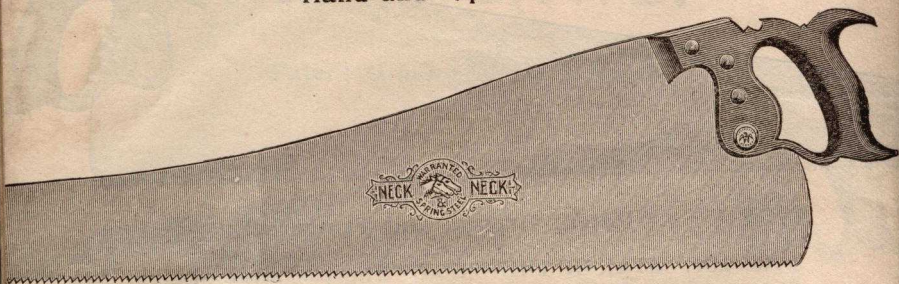
Cast Steel, Patent Ground and Tempered.

No. 104. EAGLE. Fine cast steel, straight back, polished blade, patent ground, even temper, filed and set ready for use. Walnut handle with polished steel plate, three improved saw screws. Etched to order.

Inches...	16	18	20	22	24	26	28	30
	\$6 50	\$7 00	\$7 50	\$8 00	\$8 50	\$9 00	\$9 50	12 00

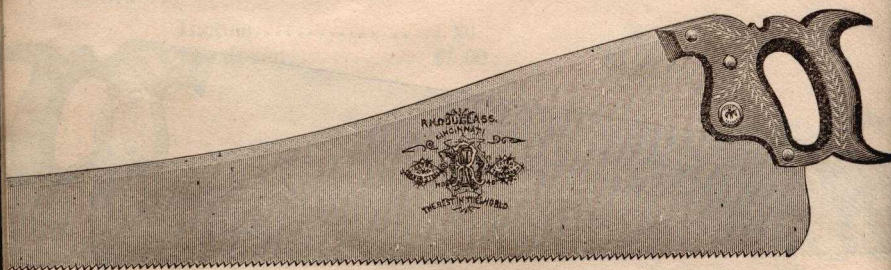
The above in one-half dozen boxes.

**Cast Steel, Patent Ground and Tempered. Panel,
Hand and Rip Saws.**



No. 108. NECK AND NECK. Fine cast Steel, full skew back, highly polished blade. Hand filed and set ready for use. Beechwood handle, polished edge, four improved screws. Has no equal in the respective grade. Perfect temper. Etched to order,

Inches..	16	18	20	22	24	26	28	30
Per doz.	\$9 00	\$10 00	\$11 00	\$12 00	\$13 00	\$14 00	\$16 00	\$19 00



HAND MADE HAND-SAWS.

No. 40. R. N. DOUGLASS. Hand-made Hand Saws for mechanics. Refined American cast steel, highly polished, full skew back blade, full taper ground, hand filed and set ready for use. Applewood or Sherrywood handle, highly finished and carved with four brass screws. Hangs light and easy. This saw excels all others in its respective grade. Etched to order. Warranted. Made also in straight back same price.

Inches....	16	18	20	22	24	26	28
Per doz.	\$13 00	\$14 00	\$15 00	\$16 00	\$17 00	\$18 00	\$20 00

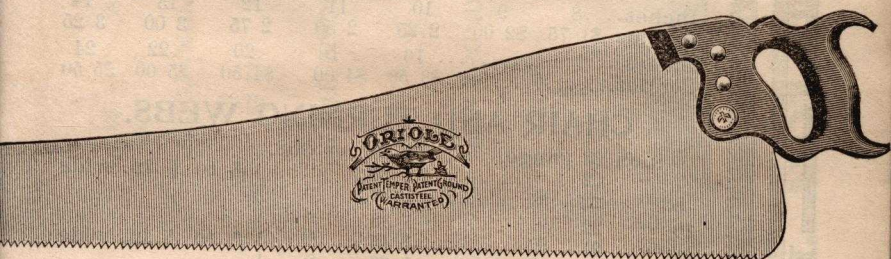


Warranted Cast Steel, Patent Ground and Tempered.

Panel and Rip.

No. 109. DEARBORN. Fine cast steel, full skew back, full width blade, highly polished, perfect temper. Hand filed and set ready for use. Beechwood handle, polished edges, with four improved brass screws. Etched to order.

Inches.....	16	18	20	22	24	26	28
Per doz.	\$11 50	\$12 50	\$13 50	\$14 50	\$15 00	\$16 00	\$18 00



Cast Steel, Patent Temper, Patent Ground.

No. 110. ORIOLE. Fine cast steel, skew back, finely polished blade, patent ground, perfect temper, filed and set ready for use. Beechwood handle, polished edges, four improved brass saw screws. Etched to order.

Inches....	14	16	18	20	22	24	26	28
Per doz.	\$7 50	\$8 00	\$8 50	\$9 00	\$9 50	\$10 00	\$11 00	\$12 00

FELLOE WEBS.

6 inch	19 gauge	.....	\$1 30	per doz.	}			
7 "	19 "	.....	1 35	"	}	$\frac{3}{16}$	to $\frac{1}{2}$	in. wide
8 "	19 "	.....	1 45	"	}			
10 "	18 "	.....	1 60	"	}			
12 "	18 "	.....	1 85	"	}			
14 "	17 "	.....	2 10	"	}	$\frac{13}{16}$	to $\frac{5}{8}$	in. wide
16 "	17 "	.....	2 35	"	}			
18 "	17 "	.....	2 70	"	}			
20 "	17 "	.....	3 00	"		$\frac{1}{4}$	to $\frac{3}{4}$	in wide
22 "	17 "	.....	3 30	"		$\frac{1}{4}$	to $\frac{3}{4}$	"
24 "	17 "	.....	3 65	"		$\frac{1}{4}$	to $\frac{7}{8}$	"
26 "	17 "	.....	4 00	"		$\frac{1}{4}$	to $\frac{1}{2}$	"
28 "	17 "	.....	4 40	"		$\frac{1}{4}$	to 1	"
30 "	16 "	.....	4 80	"		$\frac{1}{4}$	to 1	"
32 "	16 "	.....	5 20	"		$\frac{1}{4}$	to 1	"
34 "	16 "	.....	5 60	"		$\frac{1}{4}$	to 1	"
36 "	16 "	.....	6 00	"		$\frac{1}{4}$	to 1	"

1 gauge heavier than the above list, no extra charge;
5 per cent extra for each additional gauge to 14 gauge;
above 14 gauge, special price. Extra width 10 per cent
for each $\frac{1}{8}$ inch.

FAY'S SCROLL SAWS.

Inches....	8	9	10	11	12	13	14
Per doz.	\$1 75	\$2 00	2 25	2 50	2 75	3 00	3 25
Inches.....			16	18	20	22	24
Per doz.....			\$3 50	\$4 00	\$4 50	\$5 00	\$5 50

CHAIR AND TURNING WEBS.

6 inch	23 gauge	.....	\$1 20	per doz.	}			
7 "	22 "	.....	1 25	"	}	$\frac{3}{16}$	to $\frac{1}{4}$	in. wide
8 "	22 "	.....	1 30	"	}			
10 "	22 "	.....	1 35	"	}			
12 "	21 "	.....	1 45	"	}	$\frac{3}{16}$	to $\frac{5}{16}$	in. wide
14 "	21 "	.....	1 60	"	}			
16 "	20 "	.....	1 80	"		$\frac{3}{16}$	to $\frac{3}{8}$	in. wide
18 "	20 "	.....	2 00	"		$\frac{3}{16}$	to $\frac{1}{2}$	"
20 "	20 "	.....	2 25	"		$\frac{3}{16}$	to $\frac{5}{8}$	"
22 "	20 "	.....	2 50	"		$\frac{1}{4}$	to $\frac{3}{4}$	"
24 "	19 "	.....	2 80	"		$\frac{1}{4}$	to $\frac{7}{8}$	"
26 "	19 "	.....	3 10	"		$\frac{1}{4}$	to 1	"
28 inch	19 gauge	.....	\$3 45	per doz.		$\frac{1}{4}$	to $\frac{7}{8}$	in. wide
30 "	19 "	.....	3 80	"		$\frac{1}{4}$	to 1	"
32 "	18 "	.....	4 20	"		$\frac{1}{4}$	to 1	"
34 "	18 "	.....	4 60	"		$\frac{1}{4}$	to 1	"
36 "	18 "	.....	5 00	"		$\frac{1}{4}$	to 1	"

OHLEN'S CHAMPION TOOTH.



Feet	4	4½	5	5½	6	6½	7	7½	8
Price each	\$1 44	\$1 62	\$1 80	\$1 98	\$2 16	\$2 34	\$2 52	\$2 70	\$2 88

OHLEN'S DIAMOND TOOTH.

Feet	4	4½	5	5½	6	6½	7	7½	8
Price each	\$1 52	\$1 71	1 90	\$2 09	\$2 28	\$2 47	\$2 66	\$2 85	\$3 04

OHLEN'S AMERICAN TOOTH.

Feet	4	4½	5	5½	6	6½	7	7½	8
Price each	\$1 52	\$1 71	\$1 90	\$2 09	\$2 28	\$2 47	\$2 66	\$2 85	\$3 04

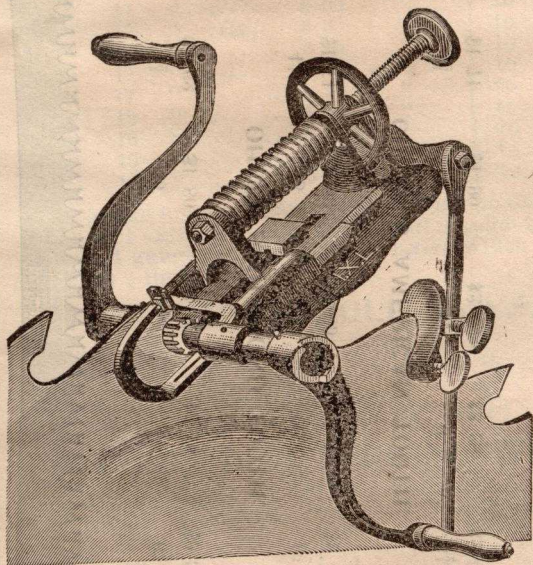
OHLEN'S CHAMPION TOOTH.

Feet	3	3½	4	4½	5	5½	6
Price each	\$2 25	\$2 60	\$3 00	\$3 35	\$3 70	\$4 10	\$4 45

OHLEN'S "I X L" SAW GUMMER

Has a Changeable Self-Feed

but is not automatic. It is pronounced *first-class* by those using it, and we sell it as such. It is designed especially as a low priced Gummer, is strong and *will do its work thoroughly*.

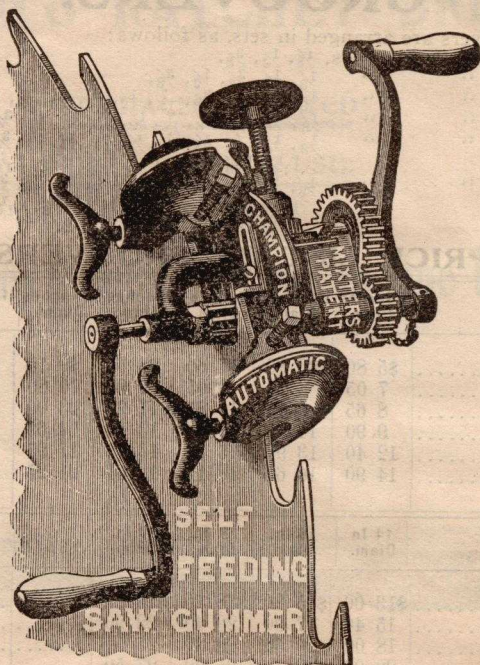


WARRANTED

The "I X L" Saw Gummer complete, with three Arbors, two cranks and wrench, with three Solid Cutters, any size on list, and one Cutter Grinder..\$15 00

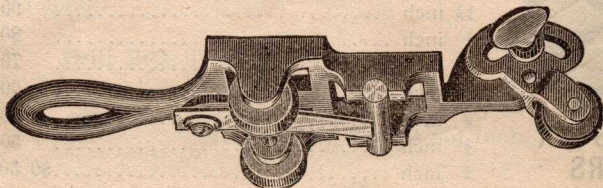
The "I X L" Saw Gummer complete, with three Arbors, two cranks and wrench, with one Inserted Tooth Cutter any size on list, and fifty (50) Teeth..\$15 00

OHLEN'S MIXTER'S CELEBRATED CHAMPION GUMMER



SELF
FEEDING
SAW GUMMER

- The Mixer Patent Automatic Self-Feeding Champion Gummer including three cutters (usual size, $\frac{3}{4}$, $\frac{1}{2}$ and 1 inch) grinder and wrench.....\$25 00
- Small size Patent Automatic Self-Feeding Champion Gummer, especially adapted for cross-cut saws and small and medium circular saws, including three cutters ($\frac{3}{8}$, $\frac{1}{2}$ and $\frac{5}{8}$ inch) grinder and wrench..... 20 00
- Extra arbors for $\frac{3}{8}$, $\frac{1}{2}$ and $\frac{5}{8}$ inch cutter for Mixer's Champion Gummer..... 2 00
- Extra arbor for $\frac{3}{8}$ inch cutter for small size Mixer's Champion Gummers 1 50



Mixer's
Cutter
Grinder
Price, \$2.00

We give a Grind-
er free with each
Gummer.

GROOVERS.

The Groovers are arranged in sets, as follows:

No. 1 Set, cutting grooves,	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$.
No. 2 " " "	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$.
No. 3 " " "	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$.
No. 4 " " "	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$, $\frac{13}{16}$, $\frac{7}{8}$, $\frac{15}{16}$, 1.
No. 5 " " "	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$, $\frac{13}{16}$, $\frac{7}{8}$, $\frac{15}{16}$, 1.
No 6 " " "	$\frac{1}{8}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, $\frac{5}{8}$, $\frac{11}{16}$, $\frac{3}{4}$, $\frac{13}{16}$, $\frac{7}{8}$, $\frac{15}{16}$, 1.

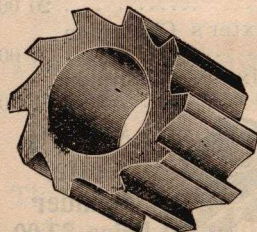
PRICE LIST OF GROOVERS.

	6 Inches Diam.	7 Inches Diam.	8 Inches Diam.	9 Inches Diam.	10 Inches Diam.	11 Inches Diam.	12 Inches Diam.
No. 1 Set.....	\$5 80	\$6 80	\$7 60	\$8 35	\$9 15	\$9 75	\$10 85
No. 2 Set.....	7 05	8 15	9 05	9 90	10 80	11 60	12 95
No. 3 Set.....	8 65	9 85	10 85	11 90	13 00	13 90	15 45
No. 4 Set.....	9 90	11 20	12 30	13 45	14 65	15 75	17 55
No. 5 Set.....	12 40	13 90	15 20	16 55	17 95	19 45	21 75
No. 6 Set.....	14 90	16 60	18 10	19 65	21 25	23 15	25 95

	14 In Diam.	16 In. Diam.	18 In. Diam.	20 In. Diam.			
No. 1 Set.....	\$13 00	\$15 80	\$18 30	\$19 80	.....	.....	.....
No. 2 Set.....	15 40	17 90	20 40	22 90	.....	.....	.....
No. 3 Set.....	18 00	20 50	23 00	25 50	.....	.....	.....
No. 4 Set.....	20 00	22 50	25 00	27 50	.....	.....	.....
No. 5 Set.....	24 25	26 75	29 25	31 75	.....	.....	.....
No. 6 Set.....	28 50	31 00	33 50	36 00	.....	.....	.....

In ordering, please state the number of set, diameter of groover, and size of hole wanted.

Extra inside cutters can be had at any time.



**MIXTER'S XX
CUTTERS**

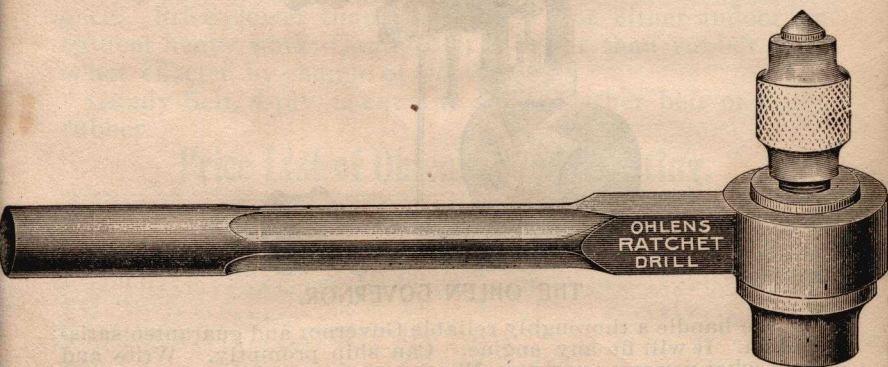
$1\frac{3}{4}$ inch	1 75
$1\frac{1}{2}$ inch	1 25
$1\frac{1}{4}$ inch	1 00
$1\frac{1}{8}$ inch	90
1 inch	80
$\frac{7}{8}$ inch	70
$\frac{3}{4}$ inch	60
$\frac{1}{2}$ inch	50
$\frac{1}{4}$ inch	50
$\frac{1}{8}$ inch	\$0 50

OHLEN'S RATCHET DRILL.

SPECIALLY ADAPTED

FOR SAW MILL USE.

Saves Many Times Its Cost In One Usage.

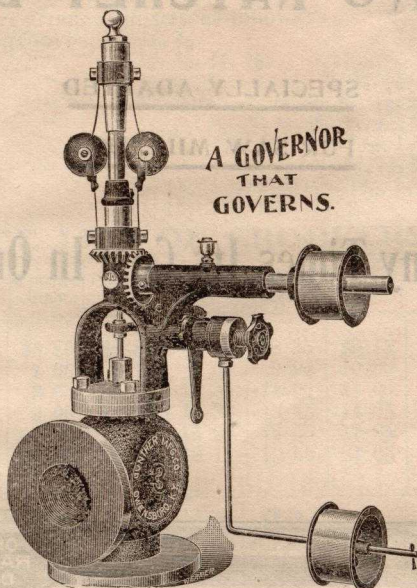


SAWMILLER'S FAVORITE. PRICE, \$4.75.

Chuck for holding drill bit, ratchet and screw is made from one solid piece of steel. Handle made from best malleable iron. Ratchet and Pawl are enclosed, preventing dust accumulating on them.

Drill Bits, $\frac{1}{4}$ to $\frac{3}{8}$,	35 cents each.
" " $\frac{1}{2}$ to $\frac{5}{8}$, ..	40 " "
" " $\frac{3}{4}$,.....	45 " "
Extra length, 5 cents per inch.	

OHLEN'S GOVERNOR



THE OHLEN GOVERNOR.

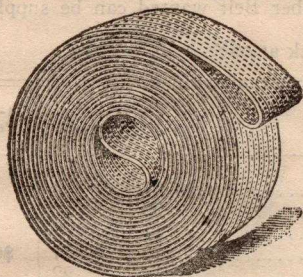
We handle a thoroughly reliable Governor and guarantee satisfaction. It will fit any engine. Can ship promptly. Write and state what you want and we will name net prices.

Following prices are subject to a discount.

PRICE LIST AND CODE WORDS OF OHLEN'S GOVERNORS.

Size.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$
Price, plain, with Sawyer's Lever	\$16 00	18 00	21 00	25 00	30 00	35 00
Code words for above.....	Come	Dig	Earn	File	Glue	Hunt
Price, with Automatic Stop and Sawyer's Lever.....	19 00	21 00	24 50	29 50	36 00	42 00
Code words for above.....	Coming	Digging	Earning	Filing	Gluing	Hinting
Size	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Price, plain, with Sawyer's Lever.....	\$40 00	50 00	60 00	71 00	83 00	94 00
Code words for above.....	Ignore	Judge	Knurl	Limp	Mix	Nurse
Price, with Automatic Stop and Sawyer's Lever.....	48 00	59 00	71 00	83 00	96 00	109 00
Code words for above.....	Ignoring	Judging	Knurling	Limping	Mixing	Nursing

Ohlen's Gandy Belting.



We have in stock the genuine Gandy Belt and can ship at once. Prices lower than elsewhere. For either indoor or outdoor heavy work, Gandy Belt is better than rubber as it is not effected by change of weather.

Gandy Belt, 4-ply, is equal to single leather belt or 3-ply rubber.

Price List of Ohlen's Gandy Belting.

4 PLY		Per Ft.	6 PLY		Per Ft
1 inch	.....	\$0 09	2 inch	.....	\$0 24
1½ "	.....	14	3 "	.....	36
2 "	.....	18	3½ "	.....	42
2½ "	.....	23	4 "	.....	48
3 "	.....	27	4½ "	.....	54
3½ "	.....	32	5 "	.....	60
4 "	.....	36	6 "	.....	72
4½ "	.....	41	7 "	.....	84
5 "	.....	45	8 "	.....	96
6 "	.....	54	9 "	.....	1 08
7 "	.....	63	10 "	.....	1 20
8 "	.....	72	12 "	.....	1 44
9 "	.....	81	13 "	.....	1 56
10 "	.....	90	14 "	.....	1 68
12 "	.....	1 08			
14 "	.....	1 26			

Three feet extra charged for splice on Endless Belts.

WRITE FOR DISCOUNT.

Can Furnish Any Width and Any Ply Desired.

OHLEN'S RUBBER BELT.

Any make of Rubber Belt wanted can be supplied.

Write for prices.

Can ship from stock at once.

WIDTH	2-Ply Per ft.	3-Ply Per ft.	4-Ply Per ft.	5-Ply Per ft.	6-Ply Per ft.
1 inch.....	\$0 07				
1 $\frac{1}{4}$ inch.....	09				
1 $\frac{1}{2}$ inch.....	11				
2 inch.....	15	\$0 17	\$0 21		
2 $\frac{1}{2}$ inch.....	18	22	26		
3 inch.....	22	26	31		
3 $\frac{1}{2}$ inch.....	26	30	37		
4 inch.....	30	34	42		
4 $\frac{1}{2}$ inch.....	33	39	47		
5 inch.....	36	43	52		
6 inch.....	43	52	62		
7 inch.....	51	60	73		
8 inch.....	59	70	84	\$1 05	\$1 26
9 inch.....	67	80	95	1 18	1 42
10 inch.....	75	90	1 07	1 33	1 60
11 inch.....	83	1 00	1 18	1 47	1 77
12 inch.....	91	1 08	1 30	1 62	1 95
13 inch.....	1 00	1 18	1 42	1 77	2 13
14 inch.....	1 08	1 28	1 54	1 92	2 31
15 inch.....	1 16	1 38	1 66	2 07	2 49
16 inch.....	1 25	1 50	1 78	2 22	2 67
18 inch.....	1 41	1 70	2 02	2 52	3 03
20 inch.....	1 58	1 90	2 26	2 82	3 39

Any size or length furnished at once. State for what purpose belt is used, and we will send belt to meet requirements.

"Good Goods, Low Prices," Ohlen's Motto.

OHLEN'S SPECIAL BRAND LACING.

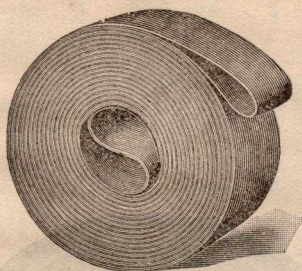
PRICE LIST OF CUT LACING.

BOTH RAW HIDE AND TANNED.

1-3 inch, per bunch.....	\$1 00
5-16 inch, per bunch.....	1 25
3 inch, per bunch.....	1 50
7-16 inch, per bunch.....	1 75
$\frac{1}{2}$ inch, per bunch.....	2 00
$\frac{3}{8}$ inch, per bunch.....	2 75
$\frac{1}{4}$ inch, per bunch.....	3 25

Put up in 100 Foot Bunches. Side Lace Leather at 25 Cents per Square Foot.

OHLEN'S LEATHER BELTS.



We handle none but best Leather Belt made. Have goods in stock for immediate shipment. Prices reasonable.

PRICE LIST.

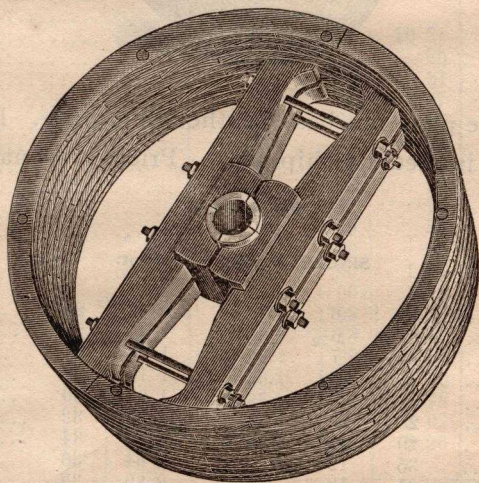
SINGLE—Per Running Foot.

$\frac{1}{2}$	0 10	6	1 32	25	5 50
$\frac{5}{8}$	12	$6\frac{1}{2}$	1 43	26	5 72
$\frac{3}{4}$	14	7	1 54	27	5 94
$\frac{7}{8}$	16	8	1 76	28	6 16
1	17	9	1 98	30	6 60
$1\frac{1}{4}$	23	10	2 20	32	7 04
$1\frac{1}{2}$	29	11	2 42	34	7 48
$1\frac{3}{4}$	35	12	2 64	36	7 92
2	41	13	2 86	38	8 36
$2\frac{1}{4}$	47	14	3 08	40	8 80
$2\frac{1}{2}$	53	15	3 30	44	9 68
$2\frac{3}{4}$	59	16	3 52	48	10 56
3	64	17	3 74	52	11 44
$3\frac{1}{4}$	70	18	3 96	56	12 32
$3\frac{1}{2}$	76	19	4 18	60	13 20
$3\frac{3}{4}$	82	20	4 40	64	14 08
4	87	21	4 62	68	14 96
$4\frac{1}{2}$	98	22	4 84	72	15 84
5	1 09	23	5 06		
$5\frac{1}{2}$	1 21	24	5 28		

Double Belting, Twice the Price of Single.

Send for Discounts.

OHLEN WOOD SPLIT PULLEYS.

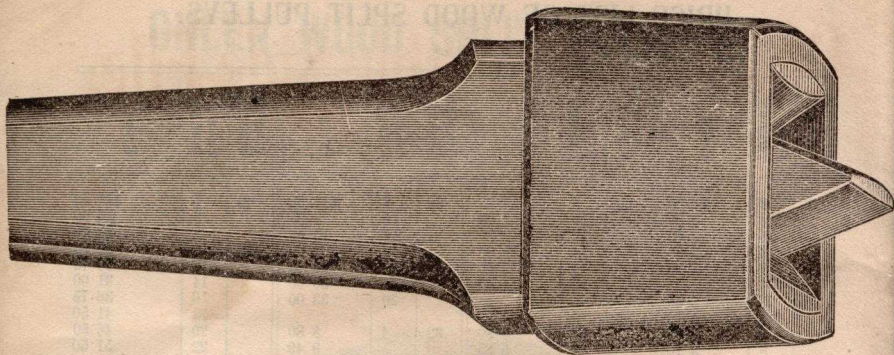


We sell the best Wood Pulleys made. Write for prices.
Quick delivery in every instance.

PRICE LIST OF WOOD SPLIT PULLEYS.

Diameter Inches	Face Inches	Price	Diameter Inches	Face Inches	Price	Diameter Inches	Face Inches	Price	Diameter Inches	Face Inches	Price
8	3	\$2 30	20	8	\$7 15	30	8	\$11 50	40	5	\$14 50
	4	2 50		10	8 00		10	13 25		6	16 00
	5	2 70		12	9 50		12	16 50		8	19 00
	6	2 90		14	11 00		14	21 00		10	22 50
	8	3 30		16	12 60		16	25 40		12	26 75
				18	14 50		18	30 00		14	31 00
10	3	2 50					20	33 00		16	36 75
	4	2 70	22	4	4 95					18	41 50
	5	2 90		5	5 80	32	4	8 80		20	46 50
	6	3 10		6	6 85		5	9 49		22	51 50
	8	3 50		8	8 00		6	10 30			
	10	3 90		10	9 40		8	12 90	42	4	15 50
				12	11 20		10	15 00		5	16 05
12	3	2 80		14	13 00		12	17 90		6	17 50
	4	2 95		16	14 20		14	22 75		8	21 50
	5	3 20		18	15 00		16	27 75		10	25 00
	6	3 55					18	32 25		12	29 00
	8	3 85	24	4	5 40		20	36 25		14	33 50
	10	4 30		5	6 35					16	43 75
	12	5 10		6	7 30	34	4	9 60		18	48 75
				8	8 80		5	10 50		20	53 75
14	3	3 00		10	10 45		6	11 50		22	55 75
	4	3 25		12	12 70		8	14 50		24	58 75
	5	3 65		14	15 10		10	17 00		26	63 75
	6	4 10		16	17 50		12	20 00			
	8	4 70		18	19 95		14	24 50	44	4	17 00
	10	5 35		20	23 00		16	30 00		5	17 50
	12	6 00					18	34 50		6	19 50
	14	6 60	26	4	6 35		20	38 50		8	23 75
				5	7 09					10	27 50
16	3	3 30		6	7 95	36	4	10 60		12	31 50
	4	3 65		8	9 60		5	11 90		14	36 00
	5	4 05		10	11 40		6	13 00		16	40 75
	6	4 60		12	14 20		8	16 00		18	46 00
	8	5 50		14	17 50		10	19 10		20	52 50
	10	6 30		16	20 80		12	22 50		22	58 00
	12	7 00		18	24 10		14	26 50		24	64 00
	14	7 70		20	27 60		16	32 40		26	70 00
	16	9 00					18	37 00			
			28	4	7 20		20	42 00	46	4	19 00
18	3	3 70		5	7 80					5	19 50
	4	4 05		6	8 60	38	4	13 00		6	22 00
	5	4 55		8	10 30		5	13 75		8	26 00
	6	5 10		10	12 10		6	14 50		10	30 00
	8	6 20		12	15 25		8	17 60		12	33 50
	10	7 10		14	19 00		10	20 70		14	38 50
	12	8 00		16	23 00		12	24 75		16	43 00
	14	9 00		18	26 90		14	28 50		18	48 00
	16	10 70		20	30 90		16	34 50		20	54 00
							18	39 25		22	60 00
20	4	4 45	30	4	8 00		20	43 25		24	66 00
	5	5 20		5	8 60						
	6	5 00		6	9 40	40	4	14 00	48	4	21 00
										5	22 00

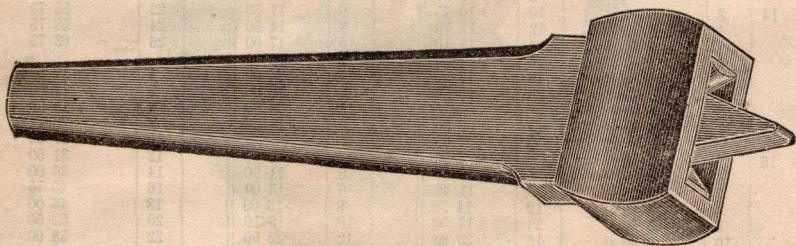
Write for Discounts.



CONQUEROR SWEDGE.

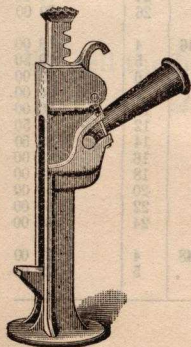
No. 0	\$3 50	No. 2	\$2.60
No. 1	3 00	No. 3	2 00

Conqueror for Band Saws, \$2.50.



MIXTER SWEDGE.

No. 0	\$3.00
No. 1	4.00
No. 2	5.00
No. 3	6.00

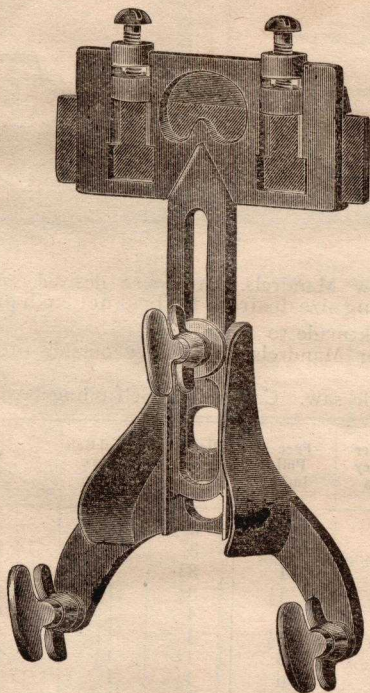


OHLEN'S LEVER JACK.

Capacity, 4 tons. Weight, 28 lbs. Height, with bar down, 17 inches. Rise of bar, 10 inches. Made of malleable iron or steel. Just the thing for saw mill or thresher use.

Price Only \$5.00

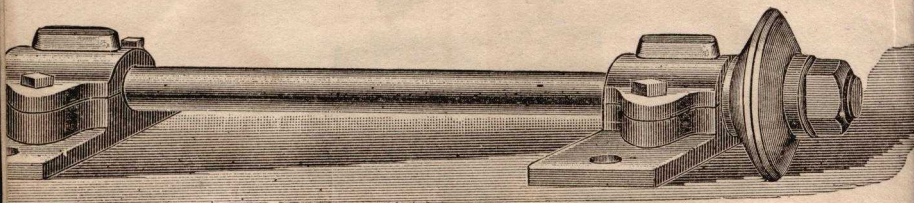
Ohlen's Adjustable Side File.



Our Side File is made so as to use any worn Mill File, not causing user to pay an exorbitant price for special file as other makers require. Our Side File regulates the width of tooth, making them uniform. They are indispensable. Get one and make smooth lumber.

Price Complete, Net \$1.00

Ohlen's Circular Saw Mandrels.



Ohlen's Circular Saw Mandrels. Any size desired. Warranted in every way. Write stating size desired, for best net cash price. Special mandrels for special work made to order.

We fill all orders for Mandrels with pulley outside of boxes, unless otherwise ordered.

Price does not include saw. Cast steel. Self-oiling boxes.

Extreme Length Inches	Diameter of Arbor Inches	Diameter of Pulley Inches	Face of Pulley Inches	Diameter of Collar Inches	Size of Hole in Saw Inches	Size of Saw Inches	Price Each
16½	1 1/8	3	3	3	1	6 to 12	\$8 00
19	1 1/8	3	3½	3	1	14 to 18	9 00
21½	1 3/8	3	4	3½	1 1/8	20 to 24	9 50
24	1 3/8	3½	4½	3½	1 1/8	26 to 28	11 25
26	1 5/8	4	5	4	1 1/4	30 to 32	12 50
28	1 5/8	4½	5½	4	1 1/4	34 to 36	14 00
30½	1 7/8	5	6	4½	1 3/8	36	15 00
33½	1 7/8	5	6	4½	1 3/8	36	18 00
37	1 9/8	6	7	4½	1 3/8	38	23 50
41	1 11/8	7	8	5	1 5/8	40	28 00
44½	1 13/8	8	10	5	1 5/8	40	33 50
48	1 15/8	10	10	5	1 5/8	42	40 00
54	2 1/8	12	10	5	2	48	50 00

Our Mandrels are made with pulley on right-hand side, with left-hand thread, unless otherwise ordered.

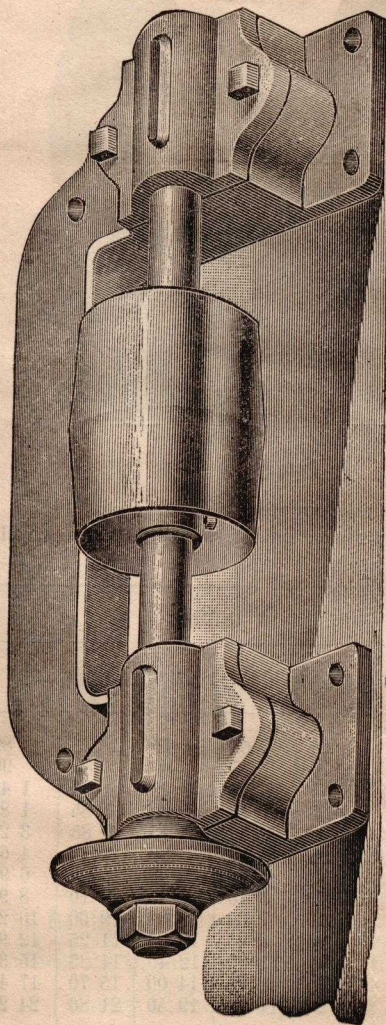


OHLEN'S SMELTING LADLE.

Send 90 cents in stamps.

Ohlen's Yoke Mandrels,

Made from best cold rolled steel shafting. Extra heavy frames and warranted in every way. Yokes made from 10 to 24 inches inclusive. Self Oiling Boxes.



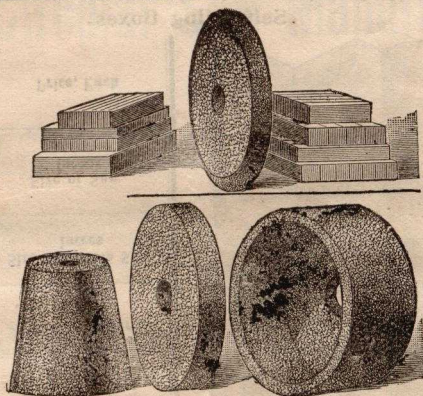
PULLEY	Diam. In.	Face In.	Diameter of Arbor Inches	Out to Out Boxes Inches		Size of Collar Inches	Size of Hole in Saw Inches	Size of Saw Inches	Price, Each
No. 1.....	2½	3	1 1/8	10	No. 1.....	3 3/8	1 1/2	6	\$9 00
No. 2.....	3	4	1 1/8	14	No. 2.....	3 3/8	1 1/2	8	11 00
No. 3.....	3½	4½	1 3/8	16	No. 3.....	3 3/8	1 1/2	10	12 50
No. 4.....	4	5	1 5/8	18	No. 4.....	3 3/8	1 1/2	12	14 50
No. 5.....	4½	5½	1 7/8	20	No. 5.....	4	1 1/2	14	16 00
No. 6.....	5	6	1 7/8	22	No. 6.....	4	1 1/2	16	18 00
No. 7.....	6	7	1 7/8	24	No. 7.....	4½	1 1/2	18	20 00

A SPLendid BABBIT METAL

At 8 cents per pound. A better grade at 10 or 12 cts.

Try a few pounds.

CYCLONE WHEEL.



Will run wet or dry. Guaranteed not to case harden.

All sizes in Stock.

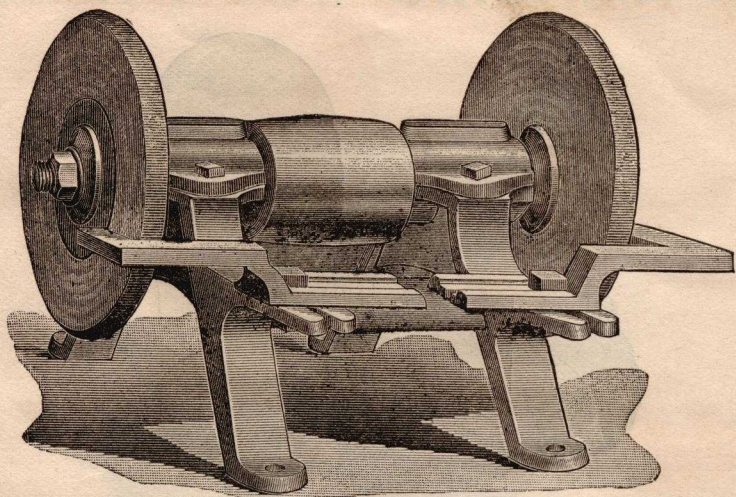
Price List.

All the leading Emery Wheels carried in stock.

State what work you expect to perform, and we will give you a wheel that will do the work at a low price.

Diameter in Inches	THICKNESS OF WHEELS IN INCHES									
	$\frac{1}{4}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
$1\frac{1}{2}$	40	45	45	50	55	60	65	70	75	89
2	50	52	55	60	65	70	75	80	85	90
$2\frac{1}{2}$	65	70	75	85	95	1 05	1 15	1 25	1 35	1 45
3	75	85	85	1 10	1 25	1 35	1 45	1 60	1 85	1 85
4	1 10	1 25	1 35	1 60	1 90	2 20	2 50	2 75	2 85	3 25
5	1 40	1 60	1 80	2 10	2 60	3 00	3 45	3 80	4 20	4 65
6	1 75	2 15	2 50	3 05	3 70	4 30	5 00	5 60	6 25	6 90
7	2 30	2 75	3 15	3 95	5 00	5 60	6 40	7 25	8 10	8 90
8	2 60	3 10	3 60	4 50	5 70	6 40	7 60	8 30	9 60	10 20
9	3 15	4 50	3 85	4 90	6 80	8 05	9 25	10 25	11 25	12 95
10	3 70	4 40	5 10	6 60	8 10	9 50	11 00	12 40	14 25	15 35
12	5 25	5 50	6 00	7 40	9 00	10 70	12 75	14 00	15 70	17 40
14	6 20	7 45	8 70	10 70	13 25	15 20	17 80	19 50	21 80	24 20

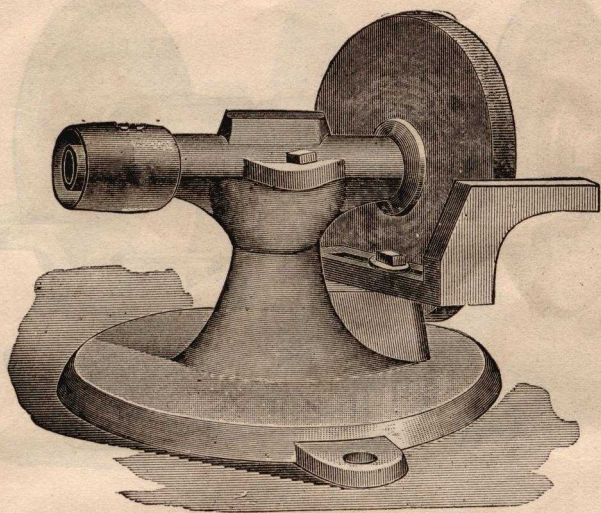
Ask for prices on sizes not listed here. Liberal discount off list.



OHLEN'S DOUBLE EMERY STAND.

Size shaft one and one-sixteenth inch. Good bearing, best of Babbitt. Pulley $3\frac{1}{2}$ inch face, 3 inch diameter. Use any size wheel up to ten by one inch, one inch hole.

Emery Stand complete, without wheel, \$7.75 net.

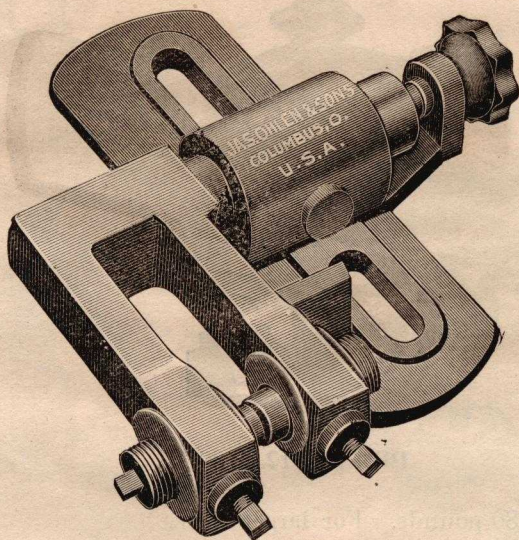


OHLEN'S SINGLE EMERY STAND.

Size shaft, one inch. Length of bearing, six inches. Best of Babbitt. Size of pulley, 3 by 3 inches. Use any size wheel up to 10 by $\frac{7}{8}$ inch, with $\frac{7}{8}$ inch hole.

Emery Stand complete without wheel, \$6.00 net.

Ohlen's Saw Guide No. 1.



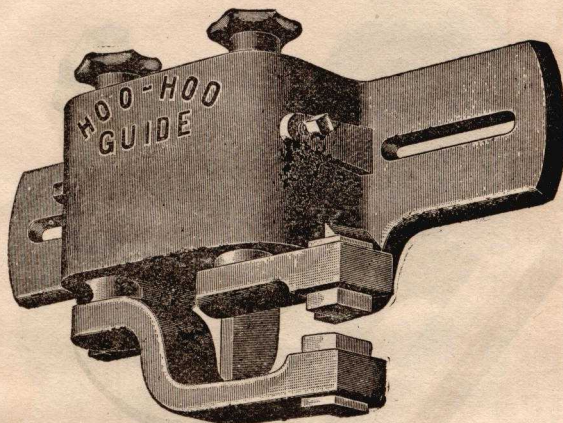
PRICE \$6.50 NET.

Will fit either right or left hand mill of any make, or money refunded.

Weight of Guide, 40 pounds.

DIRECTIONS:—Set up the two set screws so the guide pin will turn a little hard, make no further adjustment. The three set screws have a soft copper plug on ends, so in setting them up it will not mar or cut the threads in guide pin. The leather filled plugs in guide pin will keep the saw from drumming.

Ohlen's Saw Guide No. 2.



PRICE, \$12.00 NET.

Weight 80 pounds. For larger mills.

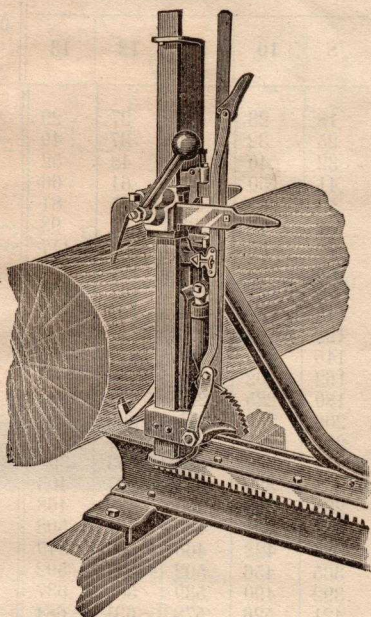
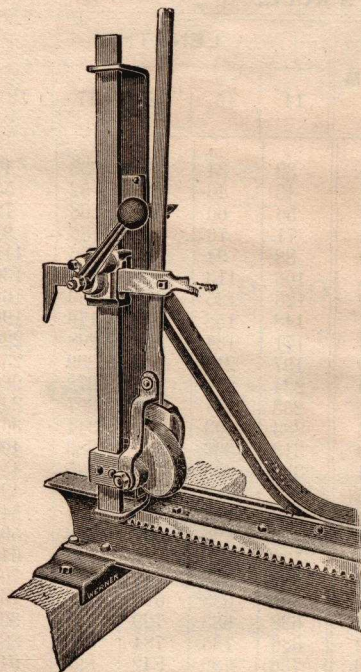
CLIPPER HACK SAWS.

PRICE LIST.

	Per Doz.	Per Gross.
6 inch.....	\$0 55	\$6 60
7 inch.....	60	7 20
8 inch.....	65	7 80
9 inch.....	70	8 40
10 inch.....	85	10 20
11 inch.....	95	11 40
12 inch.....	1 05	12 60
14 inch.....	1 25	15 00
Assorted.....	65	7 80

We carry a full stock of Hack Saw Frames.

Knight's New Ideal Saw Mill Dog.



We have sold large numbers of the above Dogs, and our customers in every instance have had the best of results. They are the strongest and easiest adjusted of any on the market. To any person reliable, we will put them in on thirty days' trial.

No. 1.	For Pony Mills, per pair.....	\$25 00	\$45 00
No. 2.	For Medium Mills, per pair.....	30 00	50 00
No. 3.	For Heavy Mills, per pair	35 00	55 00
No. 3.	Special for Steam Feed.....	60 00	85 00
No. 4.	Extra Heavy, for Steam Feed.....	85 00	125 00

The Mill Dogs are made right and left hand. For a right hand mill a right hand Dog is used on the front head block and a left hand on the rear block. On a left hand mill a left hand Dog is used on the front head block and a right hand on the rear.

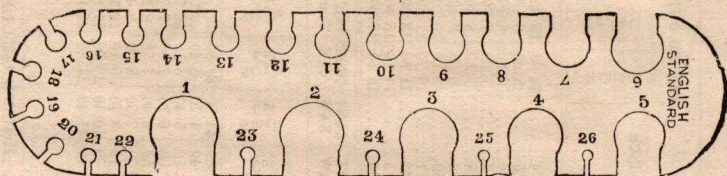
OHLEN'S LOG TABLE.

BY DOYLE'S RULE.

LENGTHS					DIAM.	LENGTHS				
8	10	11	12	13		14	15	16	17	18
18	23	25	27	29	10	32	34	36	38	40
25	32	34	37	40	11	43	46	49	52	55
32	40	44	48	52	12	56	60	64	68	72
41	50	55	61	66	13	71	76	81	86	91
50	62	65	75	81	14	88	94	100	106	112
61	75	83	91	98	15	106	113	121	128	136
72	90	99	108	117	16	126	135	144	153	162
85	105	116	126	137	17	148	158	169	179	190
98	122	135	147	159	18	171	184	196	208	220
113	140	154	169	182	19	197	211	225	239	253
128	160	176	192	208	20	224	240	256	272	288
145	180	198	217	235	21	253	271	289	307	325
162	202	223	243	263	22	283	303	324	344	364
180	225	248	271	293	23	313	336	359	383	406
200	250	275	300	325	24	350	375	400	425	450
221	275	302	331	358	25	386	413	441	468	496
242	302	333	363	393	26	423	453	484	514	544
265	330	363	397	403	27	463	496	530	563	596
288	360	396	432	468	28	504	540	576	612	648
313	391	430	469	508	29	547	586	625	664	703
338	422	465	507	549	30	591	633	676	718	761
365	456	502	547	592	31	638	683	729	774	820
392	490	539	588	637	32	686	735	784	833	882
421	526	578	631	684	33	736	789	842	895	946
450	562	619	675	731	34	787	844	900	956	1012
481	601	661	721	781	35	841	901	961	1021	1081
512	640	704	768	832	36	896	960	1024	1088	1152
545	681	749	817	884	37	953	1021	1089	1157	1225
578	723	795	867	939	38	1011	1083	1156	1228	1300
613	765	842	918	996	39	1070	1149	1225	1302	1379
648	810	891	972	1053	40	1134	1215	1296	1377	1458
685	855	942	1027	1113	41	1198	1284	1369	1455	1541
722	903	994	1083	1173	42	1264	1354	1444	1534	1625
761	952	1046	1141	1237	43	1331	1426	1521	1616	1711
800	1000	1100	1200	1300	44	1400	1500	1600	1700	1800
840	1051	1156	1261	1366	45	1471	1576	1681	1786	1891
882	1103	1213	1323	1434	46	1544	1654	1764	1874	1985
924	1156	1271	1387	1502	47	1618	1734	1849	1964	2080
968	1210	1331	1452	1573	48	1694	1815	1936	2057	2178
1012	1265	1392	1519	1645	49	1772	1898	2025	2152	2278
1058	1322	1455	1587	1719	50	1850	1984	2116	2248	2380

SAW GAUGE.

For determining thickness of saw.

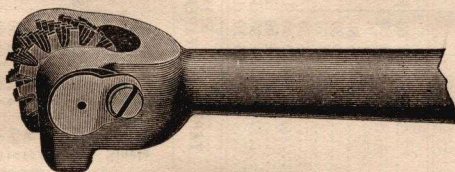


Price, \$1 30

SILVER SOLDER—Best.

Ohlen's Perfection Silver Solder for brazing purposes, per oz. \$1.00.

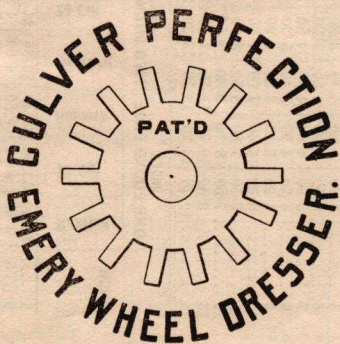
OHLEN'S EMERY WHEEL DRESSER.



All complete ready to use. Price net, \$1.25.

Extra Cutters, per set, 25 cents each.

CUTTERS.



FILES AND RASPS—BEST QUALITY CAST STEEL.

PRICE PER DOZEN.

INCH	MILL AND ROUND				FLAT			SQUARE			HAND AND PILLAR			INCH			HLF. RD. & THREE SQ		
	ONE ROUND EDGE		TWO ROUND EDGES		MILL		INCH	TAPERS		SLIM TAPERS		Band Saw Blunt & Taper		INCH	PIT SAW	CANT SAW	CROSS CUT		Planer Knife
	Bastard	2d Cut	Smooth	Bastard	2d Cut	Smooth		Single	Double	Single	Double	Regular	Slim				Single	Single	
4	\$3.00	\$3.50	\$3.90	\$3.70	\$4.30	\$4.70	4.....	\$3.80	\$4.60	\$5.00	\$3.70	\$4.30	\$3.90	\$4.70	5.30	4.....	\$4.80	\$5.60	\$6.10
5	3.20	3.80	4.10	3.90	4.60	4.90	5.....	4.10	4.80	5.20	3.90	4.70	5.30	5.30	5.30	5.....	5.40	6.10	6.40
6	3.50	4.00	4.50	4.30	5.00	5.30	6.....	4.60	5.10	5.60	4.30	5.10	5.60	5.60	5.60	6.....	6.10	6.70	7.10
7	3.90	4.60	4.90	4.80	5.50	6.10	7.....	5.10	5.80	6.30	4.90	5.80	6.30	6.30	6.30	7.....	7.00	7.70	8.20
8	4.30	4.90	5.40	5.30	6.10	6.60	8.....	5.60	6.30	7.00	5.40	6.30	6.70	6.70	6.70	8.....	8.50	8.80	9.00
9	4.90	5.80	6.30	6.20	7.00	7.90	9.....	6.10	7.00	8.00	6.00	6.80	7.30	7.30	7.30	9.....	9.50	9.80	9.90
10	5.60	6.40	7.00	7.00	8.10	8.70	10.....	7.40	8.50	9.10	7.50	8.70	9.40	9.40	9.40	10.....	10.10	10.70	10.70
11	6.70	7.80	8.50	8.60	9.80	10.70	11.....	9.10	10.40	11.30	9.40	10.90	11.80	11.80	11.80	11.....	11.80	12.30	12.70
12	7.50	8.60	9.40	9.70	11.00	12.10	12.....	10.20	11.50	12.80	10.70	12.30	13.50	13.50	13.50	12.....	12.80	13.30	13.90
13	9.40	10.70	11.70	11.80	13.60	14.70	13.....	12.50	14.30	15.40	13.30	15.20	16.20	16.20	16.20	13.....	14.10	15.40	16.60
14	10.70	12.20	13.10	13.30	15.30	16.70	14.....	13.90	16.10	17.50	15.00	17.00	18.20	18.20	18.20	14.....	15.50	17.00	18.30

Write for prices on sizes not given. CLIMAX advance 2 in. on half-round bastard. ROUND GULLETTING, take pitsaw price. We handle the best File, but not the one costing least money.

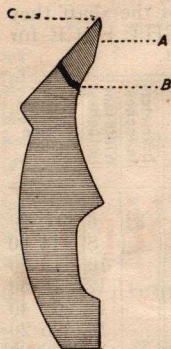
IRON PULLEYS.

Bored, Turned and Balanced with Set Screws or Key Seat.

In ordering Pulleys, be careful to give EXACT size of the shaft they are to go on; also state if they are wanted with STRAIGHT FACE for shifting belt, or ROUNDING FACE for non-shifting belt.

Diameter in Inches	Width face in Inches	Price	Diameter in Inches	Width face in Inches	Price	Diameter in Inches	Width face in Inches	Price	Diameter in Inches	Width face in Inches	Price	Diameter in Inches	Width face in Inches	Price
6	3	\$1 20	12	5	\$2 90	16	16	\$9 70	26	4	\$5 75	34	6	\$11 20
	4	1 45		6	3 30					5	6 70		8	14 00
	5	1 70		8	4 20	18	3	3 00		6	7 70		10	16 80
	6	1 90		10	5 05		4	3 60		8	9 60		12	19 50
7	3	1 35		12	5 90		5	4 20		10	11 50		14	22 40
	4	1 75		14	6 70		6	4 80		12	13 45		16	25 20
	5	1 88	13	3	2 25		8	6 00		14	15 50		18	28 00
	6	2 15		4	2 70		10	7 20		16	17 25		20	30 75
				5	3 15		12	8 40		18	19 20			
8	3	1 50		6	3 60		14	9 60				36	5	10 65
	4	1 80		8	4 50		16	10 80	28	4	6 40		6	11 15
	5	2 10		10	5 40	20	4	3 95		5	7 40		8	15 20
	6	2 40		12	6 30		5	4 60		6	8 45		10	18 25
	8	3 00		14	7 20		6	5 30		8	10 60		12	21 25
	10	3 60					8	6 60		10	12 70		14	24 50
9	3	1 65	14	3	2 40		10	7 70		12	13 90		16	27 35
	4	2 00		4	2 95		12	9 25		14	17 00		18	30 35
	5	2 30		5	3 36		14	10 55		16	19 00		20	33 45
	6	2 65		6	3 85		16	11 90		18	20 55	38	6	12 00
	8	3 30		8	4 80		18	12 20	30	4	6 95		8	16 40
	10	3 95		10	5 15					5	8 10		10	20 10
10	3	1 80	15	3	2 55	22	4	4 55		6	9 25		12	22 90
	4	2 15		4	3 05		5	5 30		8	11 60		14	26 25
	5	2 52		5	3 58		6	6 07		10	13 90		16	29 00
	6	2 95		6	4 10		8	7 60		12	16 20		18	32 85
	8	3 60		8	5 10		10	9 10		14	18 55		20	36 05
	10	4 30		10	6 10		12	10 65		16	20 90	40	6	14 05
	12	5 05		12	7 15		14	12 15		18	23 20		8	17 60
11	3	2 00	16	3	2 70	24	4	5 20	32	5	8 96		10	21 10
	4	2 35		4	3 25		5	6 05		6	10 25		12	24 60
	5	2 73		5	3 84		6	6 85		8	12 80		14	26 15
	6	3 10		6	4 30		8	8 60		10	15 35		16	31 70
	8	3 90		8	5 40		10	10 30		12	18 00		18	35 20
	10	4 70		10	6 50		12	12 00		14	20 45		20	38 75
	12	5 45		12	7 55		14	13 70		16	23 05	42	6	15 05
12	3	2 10	14	8 65		16	15 50		18	25 60		8	19 55	
	4	2 52				18	17 30		20	28 15		10	23 45	
									34	5	9 80		12	27 80

Directions For Care of Saw Points.



Use flat side of file at "A" for pointing up
Round side of file at "B" for keeping
tooth in proper shape.

And "C" file no more than to knock off bur.
When inserting new points observed the following :

Wipe plate, particularly point seat, perfectly clean.

Oil grooves in points and shanks.

If point does not start readily, tap lightly
on top of point with wrench.

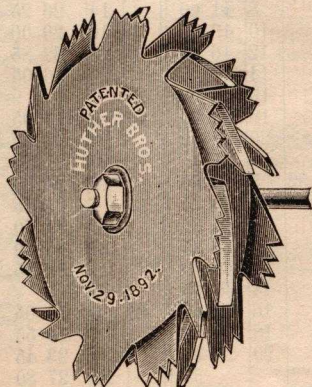
Side dress the points the same as in the case of a solid saw.

Avoid filing point on top, except so far as necessary to keep
angle to extreme, cutting point same as when point was new.

Never apply a file to the plate.

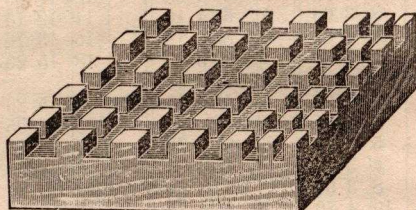
In sharpening always keep same angle on underside of point
as when point is new.

INSERTING NEW SHANKS. When inserting a new set of
shanks, first draw in each shank, using as a "starter," the point
which we furnish for this purpose, with each new saw and with
each new set of shanks. Then remove "starter" and put in
regular point.



Can be used on any Circular
Saw Mandrel.

OHLEN'S PATENT GROOVER OR DADO HEAD.



Will cut a perfect groove with or
across the grain.

OHLEN'S LOG RULE.

Subtract four inches from the diameter, multiply by one-half the remainder, multiply by the length of the log in feet, divide by 8, this gives the number of feet in any log, no matter what the length or diameter, same as Scribner's Log Book.

HOW TO CALCULATE SPEED.

To find the speed of a countershaft, if the revolutions of the main shaft and size of pulleys are given:

Multiply the revolutions of the main shaft by the diameter in inches of the pulley and divide by the diameter in inches of the pulley on the counter-shaft; the quotient will be the number of revolutions.

Example.—What will be the speed of a counter-shaft with a 12-inch pulley, driven by a 30-inch pulley 180 revolutions per minute? $180 \times 30 \div 12 = 450$.

To find the size of a pulley required, if the number of revolutions and size of pulley on the main shaft are given:—Multiply the diameter in inches of driving pulley by the revolutions of the main shaft, and divide by the speed required; the quotient will be the diameter in inches of the pulley.

Example.—What will be the diameter of a pulley to make a counter-shaft turn 450 revolutions per minute, driven by a 30-inch pulley 180 revolutions per minute? $180 \times 30 \div 450 = 12$ -inch pulley.

To find the size of a pulley for a main shaft if the speed of shafts and diameter of the pulley on the counter-shaft are given: Multiply the diameter in inches of pulley by speed of the counter-shaft; the quotient will be the diameter of the pulley.

Example.—What will be the diameter of a pulley on a main shaft making 180 revolutions per minute to drive a 12-inch pulley 450 revolutions per minute? $450 \times 12 \div 180 = 30$ -inch pulley.

TO BE A SUCCESSFUL SAWYER.

1st. Acquire a sufficient knowledge of machinery to keep a mill in good repair.

2d. See that both the machinery and saws are in good order.

3d. It does not follow because one saw will work well that another will do the same on the same mandrel, or that even two saws will hang alike on the same mandrel; on the principle that no two clocks can be made that tick alike, no two saws can be made that will run alike.

4th. It is not well to file all the teeth of circular saws from the same side of the saw, especially if each alternate tooth is bent for the set, but file one-half the teeth from each side of the saw, and of the teeth that are bent from you, so as to leave them on a slight bevel and the outer corner a little the longest.

5th. Never file any saw to too sharp or acute angles under the teeth, but on circular lines, as all saws are liable to crack from sharp corners.

6th. Keep your saw round, so that each tooth will do its proportional part of the work, or, if a reciprocating saw, keep the cutting points jointed on a straight line.

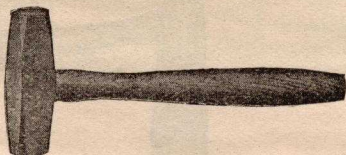
7th. The teeth of all saws wear narrowest at the extreme points; consequently they must be kept spread so that they will be widest at the very points of the teeth, otherwise saws will not work successfully.

8th. Teeth of all saws should be kept as near a uniform shape and distance apart as possible, in order to keep a circular saw in balance and in condition for business.

SWAGE BAR.



SWAGE HAMMER.



Swage Bars and Hammers.

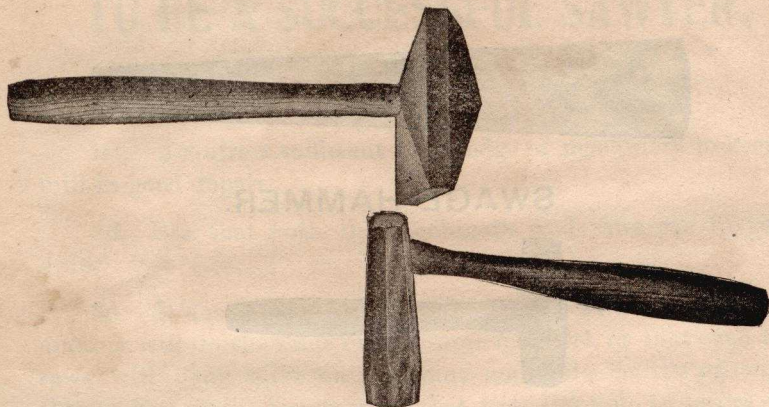
Swaging Hammers, net, each $\frac{3}{4}$ inch,.....	\$1 00
" " " " $\frac{7}{8}$ inch,.....	1 25
" " " " 1 inch,.....	1 50
No. 1—Bar, 8 or 6 sided, 11 x 1 x $1\frac{1}{2}$ inch.....	2 50
" 2—Bar, 8 or 6 sided, 11 x $1\frac{1}{4}$ x $\frac{5}{8}$ inch.....	3 00
" 3—Bar, 8 or 6 sided, 11 x $1\frac{1}{2}$ x $\frac{3}{4}$ inch.....	3 50
" 4—Bar, 8 or 6 sided, 11 x $1\frac{3}{4}$ x $\frac{7}{8}$ inch.....	4 00

STRAIGHT EDGES.



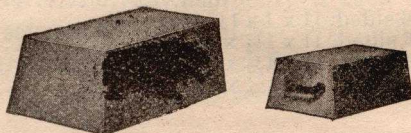
12 inch, price each... ..	\$0 65	48 inch, price each.....	\$3 00
18 " " " ".....	95	52 " " " ".....	3 50
24 " " " ".....	1 36	54 " " " ".....	3 70
30 " " " ".....	1 65	56 " " " ".....	4 00
36 " " " ".....	1 95	60 " " " ".....	4 60
40 " " " ".....	2 10	72 " " " ".....	5 50
44 " " " ".....	2 30		

HAMMERS.



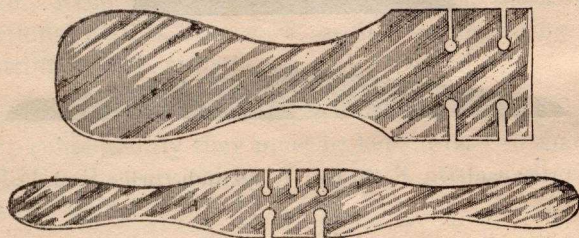
Price per pound.....50 cents.
Furnished any weight desired or any shape.

ANVILS.



40 to 250 pounds, price.....12 cents per pound.
We have all sizes in stock.

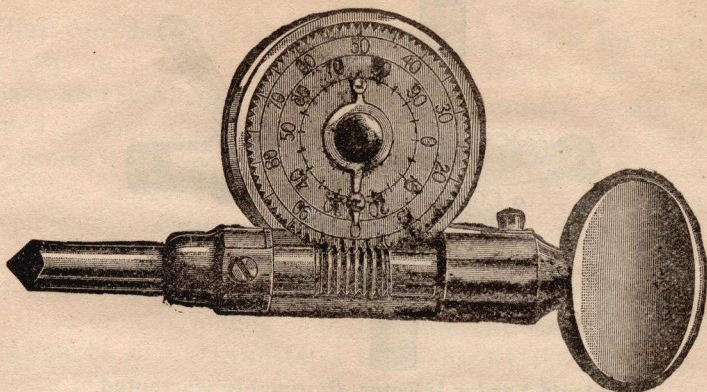
CIRCULAR MILL SAW SETS.



Made to suit saws of different sizes.

Price, large size,..... \$2 00 For Shingle Saws.....\$1 50

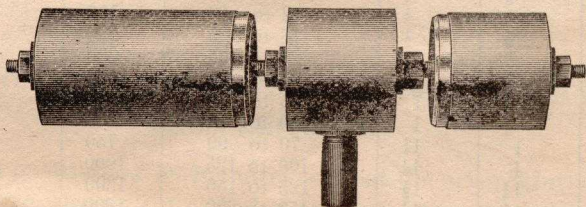
SPEED INDICATORS.



Price with Bell, ...\$1.50.

" without Bell, 90.

OHLEN'S PATENT GONG WHISTLE.



It is made all of iron and will last forever.

It makes an entirely different sound from an ordinary whistle. It can be heard distinctly from six to eight miles.

Diameter of Gong.

Price.

Size of Steam Inlet.

4-Inch.

\$12.00

1¼ Inch.

6-Inch.

14 00

1½ Inch.

8-Inch.

20.00

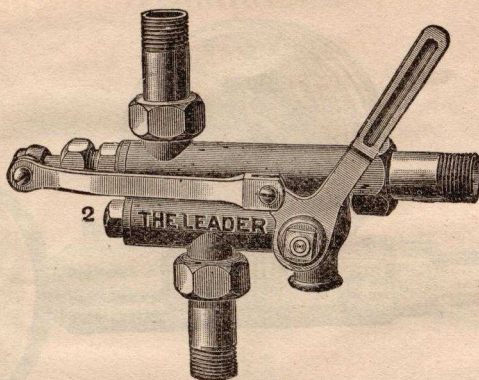
2 Inch.

10-Inch.

30.00

2½ Inch.

=== INJECTOR ===



Ohlen's Leader Injector, thoroughly warranted.

PRICE LIST.

Every Injector Tested and Fully Guaranteed.

No. of Injector	Size of Pipes		Horse Power of Boiler Will Feed.	Gals. per Hour 60 lbs. Steam	Price List
	Steam Pipe	Suction and Feed			
1	3/4	3/4	3 to 7	60	\$16 00
2	1	1	7 to 10	90	18 00
3	1 1/4	1 1/4	12 to 18	150	22 00
4	1 1/2	1 1/2	18 to 25	220	25 00
5	2	2	25 to 35	300	30 00
6	2 1/4	2 1/4	35 to 45	400	35 00
7	2 1/2	1	45 to 60	500	40 00
8	3	1	60 to 70	600	45 00
9	1	1 1/4	70 to 90	750	55 00
10	1	1 1/4	100 to 125	1000	65 00
11	1 1/4	1 1/4	125 to 150	1300	75 00
12	1 1/4	1 1/2	150 to 200	1800	90 00

Above Prices Subject to Liberal Discount.

When Ordering an Injector Please State

First.—The horse-power of your boiler and engine.

Second.—Give steam pressure carried.

Third.—If water is taken under pressure or lift.

Fourth.—If water is to be lifted give lift or distance from the Injector to the water supply, both vertically and horizontally.

In ordering repairs, please give the stock number.

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EMERY WHEELS AND BUR GUMMERS.

Great care should be taken in using emery wheels for gumming purposes that the operator does not destroy the tension of the blade, also case-harden the blade. Great caution should be exercised in gumming with emery so as not to blue the steel, which causes it to break off or crumble. To overcome this use our Cyclone emery wheel, warranted not to case-harden, and apply an emery dresser, which we have for sale, this will prevent the wheel from getting smooth and burning blade.

In gumming a saw do not attempt to finish the first round. Make three or four rounds of it, thus prevent case-hardening. Should you be so unfortunate as to case-harden the saw, apply our dresser to the emery wheel; thoroughly opening it, and then go lightly over each tooth, thereby drawing the case-harden from the blade.

When using bur gummings it is impossible to case-harden a saw, or to ruin the tension of the blade. We have an automatic gummer which gives teeth the same pitch and gullet the same depth. All of which is a great advantage over emery grinding.

PERTAINING TO NEW SAWS AND SAWS THAT HAVE BEEN REPAIRED.

Before putting saw on mandrel see that the arbor is level and perfectly true, also proper end-play (not over the thickness of a piece of writing paper.) Collars must be perfectly true so when tightened up they do not spring saw.

Use a plumbing bob or spirit level in plumbing the saw. Track must be perfectly level and in proper line. To line a track perfectly, spread head blocks as far apart as possible on carriage, and see that they are set on rim of carriage solid. Run carriage up until the blocks come within about five feet of guide,

let the front block go back past the tail of saw as far as it will, then stretch your line around the point of the blocks, if they have not been broken off. If they have, measure out from the first inch mark to the point of the block. Have tail of saw 1-16 of an inch farthest from line. This will give lead enough for any saw 48 inches and larger. This will give travel of carriage. To set a track, get a line full length and fasten clear of track. This is necessary that it may be moved without bothering line. Adjust the track to this line, giving lead 1-16 inch. Do not screw guide pins against saw until it is in motion. Then screw them up so they may run perfectly free. Should saw lead one way or other, change lead little by little until it runs perfectly straight. Should saw run out of log, change your lead in, and should it lead in change it the reverse. Great care should be taken not to change too much at one time. Always examine your mill every morning before starting up. See that everything is in good shape. Invariably go over a mill before putting in a new saw, or one that has just been repaired. If this is not done the saw is likely to be in bad shape after the very first cut. Keep your saw round.

REMARKS.

It is very important in setting a portable mill, that it be set solid so as to not move in sawing. Place the sills on which frame is set on a solid foundation by excavating. In freezing and thawing weather this will not cause the mill to get out of shape so quickly as if set immediately on the ground. Fasten frame firmly to sills. See that frame is level in every way.

In ordering saws, it is of the utmost importance that one be selected that is best suited for your requirements as to number of teeth and gauge. We are always glad to select such a saw if left to our judgment. However, we will supply any saw the order may specify. A saw having too many teeth on a light mill will

run very hard. A saw having not enough teeth on a heavy mill will run bad, and lose its tension. We would suggest that parties ordering saws, give size of mill, engine, feed and speed used, and just what saw is expected to do, and allow us to send a saw to suit. We guarantee to do this.

Examine mill every day, and see that it is in good shape. No saw can work well when mill is out of order.

Oil both sides of saw frequently. Never one side unless other at same time.

Keep saw perfectly round. Gum lightly but often. Never let teeth get blunt.

You can handle logs with less labor by having mill set in ground a foot or so.

Try to shape your teeth same as when new. See page No. 5 in this book for different styles.

Before inserting bits or shanks, carefully grease grooves with tallow or oil, thus preventing wear and rapidly becoming too large.

A sawyer must have a good swedge, file, gummer, side file, oil, mill and engine, and best of all some lively, energetic help, or but little lumber can be made.

A side file will make smoother lumber than if gauged by the eye.

Insist on having a saw bearing the brand of "THE JAMES OHLEN & SONS SAW MFG. CO.," and accept no other. Dealers will order it for you gladly.

We are always glad to answer any questions and supply you with our catalogues and printed matter.

It is a pleasure to take our patrons through our factory and explain the different processes used in turning out what can be well considered the most superior Solid and Inserted Tooth Circular Saws on the market.

We have attained that position only after a half century's experience. Our trade can always depend on the benefit of that experience.

With a full appreciation of the confidence and favors shown us in the past, and with the assurance of the high standard being fully maintained in the future, we are,

Most respectfully,

The James Ohlen & Sons Saw Mfg. Co.

COLUMBUS, OHIO, U. S. A.

FILING SAWS.

In every instance we recommend the use of a file having one round edge, which prevents a square gullet from forming. A square gullet will invariably crack the blade. Our warranty does not cover this. After beveling the front of tooth, apply a few strokes with a round cornered file to the base of tooth. Only carry bevel tooth down about one-half length. A saw will thus clear itself better. File backs of cross cut saws always square. On cross cut saws bevel the front of tooth one way, the next tooth the opposite way. File rip saws square in front.

Avoid a delicate swedge. Swedge out wide and then dress down to required width. Most cases of complaints for saw crumbling are caused by too delicate a swedge being used, as the corners of tooth are not strong enough to resist the wood it is cutting.

DIRECTIONS FOR HANGING CIRCULAR SAWS.

1. The fast collar on the saw mandrel must be perfectly true, and about one-thirty-second of an inch concave on the face; the loose collar should be flat or slightly concave. The object of this arrangement of the collars is to insure their pressing the saw at their peripheries, and also for the purpose of maintaining the saws flat and straight on the log side.

2. The mandrel must fill the eye of the saw, go in free, and both pins have a fair bearing.

3. If after the collars are screwed up, the face of the saw is not flat, or it does not run true, segments of circles cut from thin paper should be put between the fast collar and the saw sufficient in thickness to remedy the defect.

4. The mandrel must be level, so that the saw will stand plumb. The bearings must fill the boxes, and the end-play should be very light, if there is any.

5. Set the spread wheel full flush with the face of the saw, and half an inch clear of the teeth.

6. Adjust the mandrel so as to give the saw a little lead into the log. This lead or deflection should not exceed one-eighth inch in twenty feet.

7. Adjust the guide pins clear of the teeth, and close enough to touch the plate at some point in its revolution. This should be done while the saw is in motion.

8. If a saw warms at or near the center, it is evident that it requires more lead into the log. If it warms near the teeth, it should be lead out of the log. The only proper way to change the line of direction of the saw is by slewing the mandrel in the way necessary to accomplish the object.

9. If after the mandrel and guide-pins have been properly adjusted, the saw does not run straight, but will run either way, as the case may be, a thorough examination should be made and the difficulty ascertained and corrected. The fault most commonly met with is the want of power sufficient to run the saw at a uniform speed. No saw can do good work running at a high velocity unless the motion is made uniform. The proper remedy to be applied when power is deficient, is to reduce the speed of saw to the velocity that can be maintained and have saw hammered stiff. The saw should be hammered specially if it is to run at a very high speed.

SAW HAMMERING.

Practice is the only thing that will enable a mechanic to acquire skill in tensioning saws. This applies to saws more than any other tool manufactured or used. Before a saw can properly be finished ready to ship to the mill, or before it can be repaired, it is necessary to know what speed and feed the saw makes while in the cut, also hand of mill, and what horse power engine is used, and above all things it is highly important that mill be in good condition.

From conversation with our most skilled mechanic, as well as close observation during a life time experience in the manufacturing of the World's Greatest Saws, namely, the Ohlen, we are able to give a few ideas as to how one may learn the art of repairing or hammering saws. A circular saw, to do proper work, must have the body of saw opened out between the center and rim sufficiently for the speed saw is to run in the cut.

A thin saw high speeded requires that the blade be opened out until it takes a strong pull to throw the center either way when saw is standing on floor. A saw properly tensioned, and being shaken or pulled through, the body alone will vibrate, and the rim will be nearly steady.

Gumming a circular saw or heating and cooling at the rim will permanently expand saw at rim so that saw will soon become stiff in center of saw and run "snaky." To remedy this apply a round face hammer a few strokes, beginning, perhaps, 8 or 10 inches from the eye. This must be regulated by constantly trying the saw, and using a good practical judgment. Should a saw be placed at too low a speed, hammer as above stated, and observe the fact that a saw must be more open or limber in body of saw for fast speed than for slow speed; also more open or limber for hard than soft wood.

When saw is standing on floor, and shaken with the hand, and both center and rim vibrates, the saw will require hammer-

ing near the center, but when body of saw is to be opened out, do not hammer within 6 to 10 inches of the center.

When a saw is run up to speed for which it is intended, should it run wavy on rim, it needs opening out in the body of saw. Should it run steady and true out of log, it is the fault of hanging, lining, fitting or managing if it does not run steady and true in the log. Remember saw must be hammered out from 6 to 10 inches on both sides with a round face hammer to open body of saw for high speed, or when it runs wavy on rim in full motion. To examine a saw, it is necessary to have an anvil, a bench running back from anvil to wall, and a straight edge. Let rim rest on bench, center of saw on anvil, then lift with left hand the opposite side of saw, and place straight edge extending from center towards rim of saw.

If saw is properly opened in the body, the portion beneath edge, and opposite the mechanic, will drop away from straight edge. To make tension equal, the parts which drop least require hammering until the tension is equalized. This must be done clear around the saw. The center should drop a trifle more than any place else.

Remove lumps by hammering on the side on which the lumps are or on that point of saw which touches straight edge. To find lumps or ridges, stand saw on floor perpendicularly applying straight edge on center, but to find them on rim, lay saw flat on anvil, then apply straight edge on rim. Use chalk to indicate the high places, and hammer on either side of saw by laying on a wooden block, or, better still, the regular anvil. (See pages 65 and 66 for prices on saw maker's tools.)

Every blow of the hammer on saw when on an anvil opens the tension at point named. If a wooden block is used for removing lumps, it will not effect the tensions. Tension must be adjusted by hammering saw on the anvil. Lumps most always run in ridges, and should be taken out by a cross pene hammer. Change hammer over between each blow in order that the strokes cross each other. Strokes must be directly on each lump or ridge.

Always adjust the tension with a hammer having slightly oval and perfectly round face. Test the saw with a straight edge between the center and edge while flooring the saw. Go all around the saw marking the ridges and lumps. Lightly apply hammer on parts marked. After this process of leveling, see if tension remains as before, and if so your saw is ready to go on the mandrel to be tested, but should it not be, adjust the tension again with a round face hammer, then level it again and if necessary adjust for tension, put on mandrel run up to speed. If saw runs steady and true, it is ready for fitting, and when properly hung and fitted, it will stand up to its work.

SELECTION OF SAWS.

It is true that the amount of hammering and other repairing required on a saw is regulated much by the amount of work and kind of work it does; it is equally true that if saw is properly made in point of temper and first tensioning, that it will not require half the work. In using the Ohlen Saw, the purchaser is sure of a saw made from the finest select steel, and each blade is given a tough even temper, and that it is tensioned perfectly to the work required. It has taken years of experience and thousands of dollars to make our plant the largest, most complete and up-to-date saw factory the world ever knew. We are always willing to give our patrons the benefit of our knowledge.

State clearly just what you expect saw to do, and under what conditions, and we will send you a saw that will do the work.

Soliciting your trade, we are,

The James Ohlen & Sons Saw Mfg. Co.

COLUMBUS, OHIO, U. S. A.

ESTABLISHED 1852.

JAMES OHLEN & SON'S TELEGRAPH CYPHER.

For Use in Ordering Saws.

USE NUMERALS FOR QUANTITIES

UNITED—Ship without delay by Freight.

WE —Ship without delay by Express.

STAND—Special number of teeth.

RH Solid 7 Gauge.		Echolls	66	Meriwether	60	Meigs	58
Applying	44	Effingham	68	Miller	62	Mercer	60
Baker	46	Elbert	70	Milton	64	LH CCT 8 Gauge.	
Baldwin	48	Emanuel	72	Mitchell	66	Morrow	44
Banks	50	LH Solid 7 Gauge.		Monroe	68	Noble	46
Bartow	52	Fannin	44	Morgan	70	Ottawa	48
Berrien	54	Fayette	46	Montgomery	72	Pickaway	50
Adams	44	Floyd	48	RH CCT 7 Gauge.		Portage	52
Allen	46	Forsyth	50	Adam	44	Preble	54
Ashland	48	Franklin	52	Allen	46	Ross	56
Bibb	56	Fulton	54	Ashland	48	Sandusky	58
Brooks	58	Gilmer	56	Ashtabula	50	Shelby	60
Bryan	60	Glasscock	58	Athens	52	LH CCT 9 Gauge.	
Bulloch	62	Glynn	60	Belmont	54	Stark	44
Burke	64	Gordon	62	Brown	56	Summit	46
Butts	66	Greene	64	Butler	58	Trumbull	48
Calhoun	68	Guinnett	66	Champaign	60	Seneca	50
Campden	70	Habersham	68	RH CCT 8 Gauge.		Tuscarawas	52
Campbell	72	Hall	70	Clermont	44	Union	54
RH Solid 8 Gauge.		Hancock	72	Clinton	46	Van Wert	56
Carroll	44	LH Solid 8 Gauge.		Cuyahoga	48	Vinton	58
Catoosa	46	Harroldson	44	Darke	50	Washington	60
Carlton	48	Harris	46	Defiance	52	NUMBER TEETH.	
Chatham	50	Hart	48	Delaware	54	Afar	26
Chattahoochee	52	Heard	50	Erie	56	Afoot	28
Chatooga	54	Henry	52	Fairfield	58	Agate	30
Cherokee	56	Houston	54	Gallia	60	Agile	32
Clarke	58	Irvin	56	RH CCT 9 Gauge.		Agony	34
Clay	60	Jackson	58	Guernsey	44	Ahoy	36
Clayton	62	Jasper	60	Hamilton	46	Alarm	38
Clynch	64	Jefferson	62	Hardin	48	Alcove	40
Cobb	66	Johnson	64	Harrison	50	Alert	42
Coffee	68	Jones	66	Highland	52	Amazon	44
Colquitt	70	Laurens	68	Hocking	54	Ambrose	46
Columbia	72	Lee	70	Holmes	56	Amherst	48
RH Solid 9 Gauge.		Liberty	72	Huron	58	Babel	50
Corella	44	LH Solid 9 Gauge.		Knox	60	Baden	52
Crawford	46	Lincoln	44	LH CCT 7 Gauge.		Bagdad	54
Dade	48	Lownders	46	Lawrence	44	Aback	56
Dawson	50	Lumpkin	48	Licking	46	Abaft	58
Decatur	52	McDuffie	50	Logan	48	Abana	60
DeKalb	54	McIntosh	52	Lorain	50	Abase	62
Dodge	56	Macon	54	Lucas	52	Abated	64
Dooley	58	Madison	56	Mahoning	54	Ability	66
Dougherty	60	Marion	58	Medina	56	Absurd	68
Douglass	62					Abut	70
Early	64					Accent	72
						Adage	74

N. B.—Unless otherwise instructed.

A.—Shipment to be made to sender of telegram. Invoice and bill of lading to follow by mail.

B.—For shipments ordered to destination different from residence of sender, invoice and bill of lading will be mailed to sender of telegram.

C.—Saws will be sent standard holes and usual number of teeth.

Kind Timber to be Sawed.

Hardwood—Ohlen

All Kinds Timber—Oldest

Soft wood—Manufacturer

Norway Pine—On

Yellow Pine—Earth

Kind of Dresses

Spring Set—Foreign

Swedge Set—Domestic

Mandrell and Pin Holes

2— $\frac{5}{8}$ —3—Faber

2— $\frac{5}{8}$ —3 $\frac{1}{2}$ —Fabrian

2— $\frac{5}{8}$ —4—Fabric

2— $\frac{5}{8}$ —4 $\frac{1}{2}$ —Facade

2— $\frac{5}{8}$ —5—Faction

2— $\frac{3}{4}$ —3—Faculty

2— $\frac{3}{4}$ —3 $\frac{1}{2}$ —Fashion

2— $\frac{3}{4}$ —4—Fatal

2— $\frac{3}{4}$ —4 $\frac{1}{2}$ —Gate

2— $\frac{3}{4}$ —5—Gaston

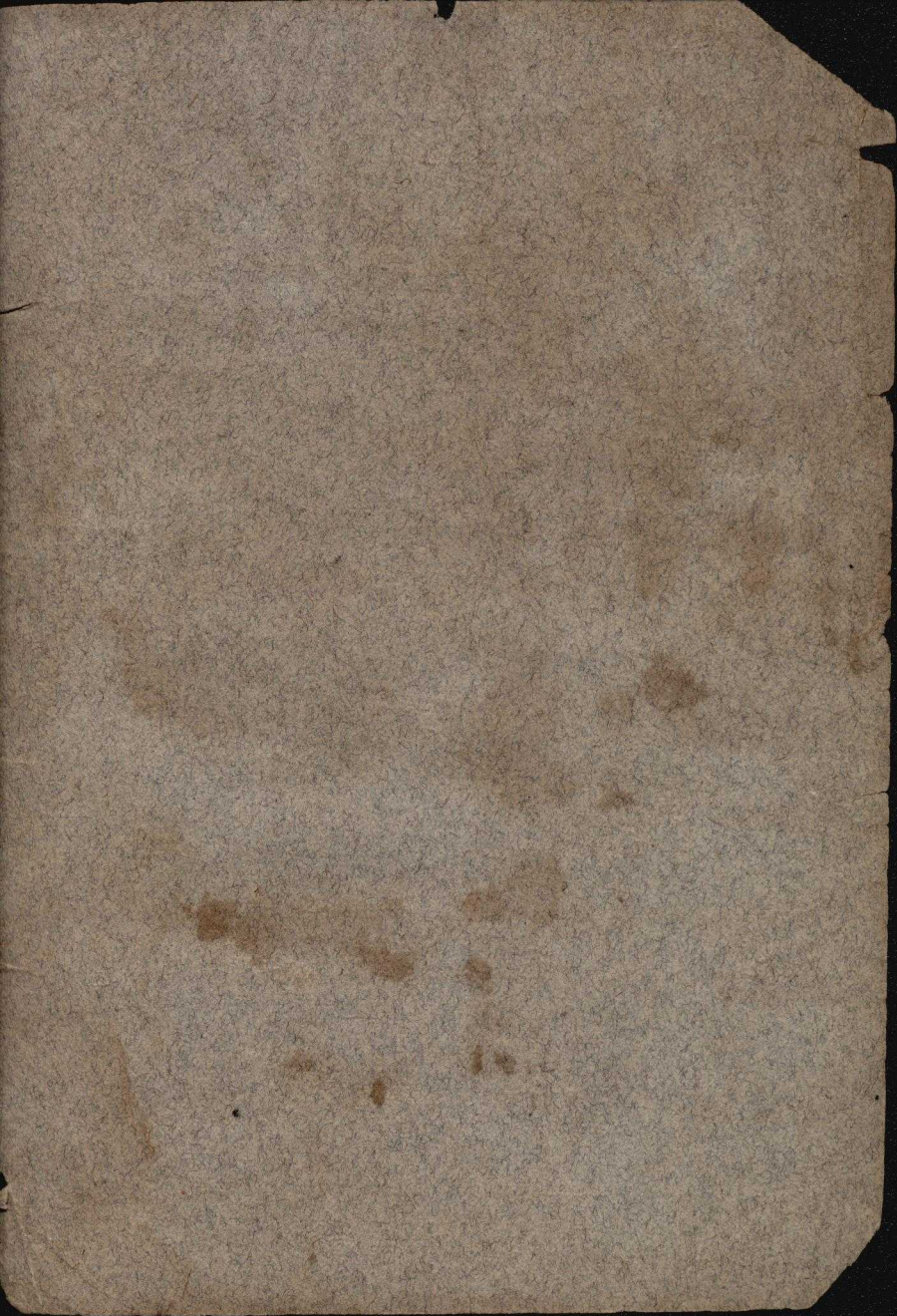
2— $\frac{3}{4}$ —6—Gasket

2— $\frac{7}{8}$ —3—Gather

2— $\frac{11}{8}$ —3 $\frac{1}{2}$ —Habit

2— $\frac{11}{8}$ —4—Hatton

2— $\frac{11}{8}$ —4 $\frac{3}{4}$ —Handy



OHLEN SAWS



STANDARD THE WORLD OVER

**Factory and General Office:
COLUMBUS, OHIO, U. S. A.**

**Export and Eastern Office:
NEW YORK CITY.**